

# THE SCHOOL REVIEW

A JOURNAL OF SECONDARY EDUCATION

---

VOLUME XXVII

SEPTEMBER 1919

NUMBER 7

---

## CORRELATION OF ABILITY IN READING WITH THE GENERAL GRADES IN HIGH SCHOOL

---

BERTHA M. SMITH  
Oak Park High School, Illinois

---

The tests described in this article are concerned with an attempt to discover whether the pupil's ability in deriving meaning from different kinds of written material correlates with his ability in school work according to his grades registered by his teachers at the end of the school year. Pupils have to deal with different kinds of written pages in order to prepare their lesson assignments. An attempt has been made to construct four different tests that would illustrate four different types of reading of which a pupil must make use in his school work.

Problem-solving is a vital factor in the lives of most first-year high-school pupils. It is quite important for a pupil to discern the bearing that one idea has upon the one immediately following in order that, at the expression of the final idea, he may grasp the full meaning of their interrelationship and express it in the form of a definite result. Concentration of thought must be continuous, or the outcome has no value. To test the pupil's ability in this kind of reading, the Kansas

Silent-Reading Test was given. It is purely a problem-solving kind of reading test and was used as such.

Another kind of ability in reading that every pupil has need of is that of being able to grasp the central idea, or main thought, in a paragraph. To be able to ascertain quickly the main idea in a paragraph furnishes one a great labor-saving device that can be used in most studies. Not to be able to recognize essentials has, undoubtedly, added to the confusion of pupils' minds that later resulted in failure. To test this ability, four paragraphs were chosen from "A Father to His Freshman Son in College" published in the *Atlantic Monthly* some years ago.

Still another test was devised in which a selection of a purely informational character was used. This kind of material can hardly be called expository or descriptive; neither is it wholly argumentative or narrative; but it seems rather to be a composite of two or more forms of writing. It differs from the narrative in that there is no thread of story to aid in calling to mind what is read; neither is there a final solution to offer as in the case of the problem form of reading; nor is there just one central idea to be remembered as in the paragraph study. To recall items of information is one of the requirements that teachers make of pupils in most of the subjects studied. The selection used in this test was taken from a number of *The Independent* published in 1915.

Perhaps the most-used kind of reading up to entrance into the high school is of a narrative type. A test was therefore constructed, the aim of which was to test the pupil's ability to follow plot, to follow the thread of the story, in terms of his school abilities. The selection chosen for the narrative experiment was a story taken from an inside page of the *Chicago Tribune*, which had appeared over two weeks before the time of the test. The groups of pupils, upon being questioned after the test as to whether they had read the story before, replied in the negative.

It is not maintained that these four tests include all the kinds of reading demanded of the pupils; nor is it maintained that these tests, as they now stand, will meet all the requirements as tests of these four kinds of reading. The results are submitted with an understanding of the difficulties encountered.

The tests were given in May, 1918, to 173 pupils in the first-year class in the Oak Park High School. They necessitated the use of six different study-periods, but were controlled by one person, the writer, and the instructions were uniformly given. To each class the paragraph test and the information test were given in the same period; and the problem-solving test and the narrative test in the same period. Instructions for the problem-solving test were in accordance with those of the leaflet containing the Kansas Test, and the time of five minutes was allowed, this being also in accord with instructions. The other three tests differed from the problem-solving test in instructions concerning the time element.

The tests were undertaken in an effort to determine the relative abilities exhibited in these four kinds of readings, in comparison with school studies. The pupil, in preparing his work for class, permits his judgment as to whether he has his lesson to enter into the matter. Teachers numberless times have heard pupils, on failing to make a recitation, say, "I thought I had my lesson." It was therefore decided to make the matter of time individual and to test, rather, the pupil's judgment as to whether he had the material.

The pupil who fails in the classroom does so through lack of ability or lack of application. The lack of ability may be mental or physical or a combination of the two. The lack of application is the result of habits formed by his environment. The standards set up in each classroom are a type of measurement of each pupil's abilities. The reasons for each pupil's failure are not always diagnosed, but the results he produces are measured by the classroom standards. Theoretically each

pupil is to measure his preparation of the lessons assigned with the standards set up for the class. Each pupil must call upon his judgment to decide whether he has his class assignment prepared well or not. Often he fails to master the work through lack of ability, but sometimes his judgment is too poorly trained to inform him in regard to the effectiveness of his preparation.

Tests must take into consideration not only the speed at which the pupil works, but also the degree of his comprehension. It has been pointed out by different writers that the rapid worker is likely to be more accurate. There is an appreciable number of pupils, however, who are slow in comprehension, and know they are slow, but stay at their work until they are confident that they have the assignment well prepared. There is a radical difference between this type of pupil and the types of pupils described in the previous paragraph.

In a test of a certain specified time, the pupil who is good but slow in his school work is likely to fall into the same group with the poor pupils. As yet no measurement has been devised that, with justice to all types of pupils, will satisfactorily estimate both rate of reading and comprehension.

In the problem-solving reading test the results were based upon the number of ideas gained in a specified time. In the paragraph test it was deemed advisable to let the pupil take the time he thought necessary for him to grasp the material. In the discussion of the results the correctness of the pupil's interpretation has been the basis of discussion without consideration of the time element. The last two tests were treated in the same manner, with the problem in mind to discover whether the pupil's ability to understand a certain type of reading material correlates with his school abilities.

The time each pupil took in each of the tests was noted, however. Because he was required to read under time conditions his concentration would tend to be more intense. The



time needed in the paragraph test ranged from 75 seconds to 280 seconds. Twenty-nine of the pupils needed from 200 seconds to 280 seconds to satisfy themselves that they understood the paragraphs. In the information test the time ranged from 65 seconds to 150 seconds; in the narrative test from 65 seconds to 155 seconds.

The school abilities of the pupils are registered in terms of school grades on the basis of correctness of ideas produced by pupils, and so, on the same basis, the last three tests were considered.

In the conducting of each of these last three tests the type-written test was placed face downward in front of the pupil, with a blank sheet of paper beside it. Then exact and uniform instructions were given to each group of pupils as to what was to be done. These instructions had been made and tried out upon a preliminary group in order to discover and avoid any lack of clearness in the understanding of the mechanism of the tests. Each pupil's rank in the problem-solving test was found by the standardized score that accompanies each problem.

In the paragraph test the task was a different one because there was no standard to go by. The pupil's answers were so varied that, to estimate their worth, one individual's judgment was not sufficient. Some sort of standard needed to be set up that would represent an aggregate of opinions for each type of answer. It was decided that the average opinions of two university classes in statistics would furnish a fair basis of standardization of answers.

Accordingly, through the courtesy of Professor H. O. Rugg, eighty-nine scorings of forty different answers were secured. Ten answers to each paragraph had been chosen, and those who did the scoring of these were asked to score on the basis of 0 to 10. In order that a more accurate scoring might be gained from these classes, the test itself was given to them after the same manner as it was submitted to the high-school pupils.

Then, from their judgments as to what was the central idea in each paragraph, they scored each pupil's answer before them. The average scoring of each of the forty varying answers was then used to rank the work of the pupils.

In the information test the "group-idea method" of scoring was used, the results being checked in the manner described by Gray in the monograph "Studies of Elementary-School Reading through Standardized Tests."

In the narrative test a key such as is described by Brown in *The Measurement of the Ability to Read* was constructed, and each pupil's reproduction was measured according to it. The number of ideas in this key that he reproduced was used as a measure of his work. Then this was expressed in terms of percentage of the total number of ideas in the key.

A comparison of the results of each test with the average of the pupils' grades in school subjects that primarily demand the use of the written page is submitted in Table I. This omits manual training and drawing. Then a comparison is made of the averaged grades of the boys with the tests; and in like manner a comparison of the averaged grades of the girls. A comparison of each of the tests is made separately with each of the studies English and algebra. These two subjects were chosen, since, by an inspection of the school grades, there seemed to be as great a variation between these two subjects as between any two subjects. Of the boys who studied Latin, only five varied more than 5 per cent from their grades in algebra; and of the girls, eight varied more than 5 per cent. In a comparison of the algebra and science, eight of the boys and ten of the girls varied more than 5 per cent in the two grades. Accordingly it was assumed that individual studies of the two subjects English and algebra would be representative of all the school work. Finally, a study is made of all the tests together compared with the school grades.

As one method of comparison the correlation coefficients of the pupils' standings in the tests and the school grades were computed. As another basis of comparison the pupils were arranged in the order of their rank in school work, and the result was divided into thirds. The upper third includes all those who had an average of 80 per cent or above; the second third includes all pupils with grades between 72 per cent and 80 per cent; and the lower third has in it all those who averaged in school 72 per cent or below.

TABLE I  
CORRELATION COEFFICIENTS

TESTS	Average of All the Grades in the Different Subjects of All the Pupils	Average of All Grades in Subjects		English Grades	Algebra Grades	Grade of Girls in English	Grade of Boys in English
		Boys	Girls				
Problem-Solving test...	0.46	0.43	0.45	0.24	0.44	.....	.....
Paragraph test...	0.54	0.56	0.42	0.52	0.34	0.40	0.57
Information test...	0.51	0.53	0.54	0.46	0.51	.....	.....
Narrative test...	0.40	0.40	0.28	0.45	0.23	.....	.....

In order that a comparison of the results of the test with the separate studies might be made, the method was followed of considering those with an average of 80 per cent or more, in each study, as one group, and those with an average below 70 per cent as another group. This gives the extremes. Of course the remaining pupils fall into the group with the average between 70 per cent and 80 per cent.

The paragraph test ranks first in degree of correlation with the average of all the school grades. With a correlation of this test of 0.54 with all the averaged grades, of 0.56 with the

boys' averaged grades, and of 0.42 with the girls' averaged grades, it is interesting to turn to Tables II, III, and IV for a comparison of the thirds. In the upper thirds of the averaged school grades, 65.5 per cent of those in all the averaged grades, 64.5 per cent of the boys' group, and 63 per cent of the girls were in the upper third of the test. In the lower thirds, likewise, 68.4 per cent of those in all the averaged grades, 67.8 per cent of the boys, and 57.7 per cent of the girls were in the corresponding lower third of the test. The middle third of the test lends itself to a rather equally proportioned distribution in the thirds of the groups under discussion. The distribution

TABLE II  
CORRELATION OF AVERAGED GRADES WITH THE TESTS BY  
DIVISIONS INTO THIRDS EXPRESSED IN PER CENT—  
ALL GRADES

TESTS	AVERAGED GRADES IN ALL SUBJECTS STUDIED		
	Upper Third	Middle Third	Lower Third
<i>Problem test—</i>			
Upper third.....	50.0	27.6	19.3
Middle third.....	36.2	44.8	19.3
Lower third.....	13.8	27.6	61.4
<i>Paragraph test—</i>			
Upper third.....	65.5	27.6	7.0
Middle third.....	20.7	48.3	24.6
Lower third.....	13.8	24.1	68.4
<i>Information test—</i>			
Upper third.....	62.0	27.6	12.3
Middle third.....	29.3	48.3	22.8
Lower third.....	8.6	24.1	64.9
<i>Narrative test—</i>			
Upper third.....	51.7	32.8	15.8
Middle third.....	29.3	34.4	36.8
Lower third.....	18.9	32.8	47.4

of the remaining number of those in the upper third of the test reveals what a small percentage of them were in the lower third of the three different groups.

TABLE III  
CORRELATION OF AVERAGED GRADES WITH THE TESTS BY  
DIVISIONS INTO THIRDS EXPRESSED BY PER CENT—BOYS

TESTS	AVERAGED GRADES IN ALL SUBJECTS STUDIED		
	Upper Third	Middle Third	Lower Third
<i>Problem test—</i>			
Upper third.....	45.20	19.3	35.5
Middle third.....	48.40	45.2	9.7
Lower third.....	6.40	35.5	58.8
<i>Paragraph test—</i>			
Upper third.....	64.50	29.0	6.4
Middle third.....	35.50	51.6	25.8
Lower third.....		19.4	67.8
<i>Information test—</i>			
Upper third.....	64.50	25.8	9.7
Middle third.....	32.25	35.5	32.3
Lower third.....	3.25	38.7	58.0
<i>Narrative test—</i>			
Upper third.....	61.30	25.8	12.9
Middle third.....	32.30	45.1	22.6
Lower third.....	6.40	29.1	64.5

A concrete illustration of this fact is furnished. One boy and seven girls in the upper third of all the grades were in the lower third of the test; while in the lower third of all the grades two boys and two girls were in the upper third of the test. In the boys' grades considered alone, no one in the upper third of the grade was to be found in the lower third of the test. In the case of the girls, four in the upper third of the grades were in the lower third of the test. In the lower third of the boys' grades, two were in the upper third of the test, and, by the same kind of comparison, two of the girls in the lower third of the grades were in the upper third of the test.

TABLE IV  
CORRELATION OF AVERAGED GRADES WITH THE TESTS BY  
DIVISIONS INTO THIRDS EXPRESSED BY PER CENT—GIRLS

TESTS	AVERAGED GRADES IN ALL SUBJECTS STUDIED		
	Upper Third	Middle Third	Lower Third
<i>Problem test—</i>			
Upper third .....	70.4	18.5	11.5
Middle third .....	18.5	51.9	26.9
Lower third .....	11.1	29.6	61.5
<i>Paragraph test—</i>			
Upper third .....	63.0	29.6	7.7
Middle third .....	22.2	40.8	34.6
Lower third .....	14.8	29.6	57.7
<i>Information test—</i>			
Upper third .....	55.6	29.6	15.4
Middle third .....	29.6	48.1	23.1
Lower third .....	14.8	22.2	61.5
<i>Narrative test—</i>			
Upper third .....	48.2	25.9	26.9
Middle third .....	25.9	40.8	34.6
Lower third .....	25.9	33.3	38.4

It is to be noticed that the correlation of this test with the English grades is high. The correlation coefficients of the boys' grades and the girls' grades were computed apart from each other that the relative correlation of each group with the test might be determined. It was discovered that both have a high percentage of correlation, but the boys' is appreciably higher.

An attempt was made to determine separately the correlation coefficients of the boys' grades in algebra and of the girls' grades in algebra with the results of this test, but because only sixty-seven of the girls had algebra as a study, and because nineteen of these were below the passing mark, it was difficult to secure a correlation table that seemed reliable. The grading system of the school does not require grades in intervals of

5 per cent much below 70 per cent, as it does above that grade. Consequently in the correlation table for the girls expressing these two relationships the assumed mean for ability in the test contained twenty-nine of the number of cases, the assumed mean being the class interval of 66 per cent. Because of the large proportion of failures and the small number of cases, no satisfactory table could be constructed.

It may be argued that this same factor may invalidate the results of the other correlations. But the greater number of cases and the smaller proportion of failures tend to reduce the influence of the few class intervals below 70 per cent.

The correlation coefficient for the boys' and girls' abilities in algebra compared with this test was determined, however, with the result of 0.34—not so high as the correlation between algebra and the problem-solving reading test.

A close relationship exists between the results of the information test and the paragraph test. With a correlation of 0.51 in this test with the total number of grades and a correlation of 0.54 on the same basis in the previous test, it can be seen that this statement is true. An inspection of Tables II, III, and IV reveals the fact that the percentage in the different thirds do not vary a great deal. The girls were not able to attain so high a degree of correspondence in the upper third of the test with the upper third of the grades as they did in the paragraph test, and in the lower third of the grades a higher percentage of them were in the upper third of the test.

Table V also reveals a likeness in results between the two tests, especially when the girls are considered alone. The same number in both tests remained in the upper thirds of the tests when those in the group of the average of 80 per cent in English are considered. In the corresponding group in algebra, only ten girls out of the twenty were in the upper third of the test. In the same group of the boys, twelve of the twenty-nine were in the upper third of the test. But none of the boys with



an average below 70 per cent in algebra were able in this test to get into the upper third. Three of the girls were.

TABLE V

GRADES IN ENGLISH AND ALGEBRA 80 PER CENT OR ABOVE					GRADES IN ENGLISH AND ALGEBRA BELOW 70 PER CENT				
TESTS	Number of Pupils				TESTS	Number of Pupils			
	Boys		Girls			Boys		Girls	
	39	29	47	20		19	23	7	19
	Eng.	Alg.	Eng.	Alg.		Eng.	Alg.	Eng.	Alg.
<i>Problem test—</i>					<i>Problem test—</i>				
Upper third....	15	13	21	16	Upper third..	7	8	....	2
Middle third...	19	15	16	2	Middle third..	1	1	....	9
Lower third....	5	1	10	2	Lower third..	11	14	7	8
<i>Paragraph test—</i>					<i>Paragraph test—</i>				
Upper third....	22	17	20	13	Upper third..	5	2	....	4
Middle third...	14	12	18	4	Middle third..	2	5	2	9
Lower third....	3	....	9	3	Lower third..	12	16	5	6
<i>Information test—</i>					<i>Information test</i>				
Upper third....	23	12	20	10	Upper third..	2	....	....	3
Middle third...	11	13	20	7	Middle third..	5	14	2	8
Lower third....	5	4	7	3	Lower third..	12	9	5	8
<i>Narrative test—</i>					<i>Narrative test—</i>				
Upper third....	21	13	18	8	Upper third..	2	3	1	3
Middle third...	13	13	28	9	Middle third..	1	3	2	8
Lower third....	5	3	11	3	Lower third..	16	17	4	8

Stated again in the terms of the correlation coefficient, the relationship between this test and the grades in English is 0.46; between this test and the grades in algebra, 0.51; between this test and the averaged grades of the boys, 0.53; between this test and the averaged grades of the girls, 0.54. These correlations present direct evidence of the strong relationship between reading ability and ability in school work. If the

argument is brought forth that this test reveals only the general intelligence of the pupil which he also reveals in his school work, the answer can be made that the intelligence of the pupil used in his school work must rest on the basis of his reading ability, and, consequently, if a measure of his reading ability can be secured, a measure of his possible ability in school work can also be secured.

It is interesting to look at the correlations in the narrative test at the outset. More variation is indicated here than in any of the other tests. The boys in this test are practically as uniform in the correspondence of their ability in this test compared with their school work as in the results of the other tests. But this is not true of the girls. In the table of the girls are found wide variations. A marked scattering of the thirds is seen here.

The writer can give no substantiated reason for this, but offers the suggestion that a larger majority of girls read a greater quantity of stories than do boys. Observation for a period of years of the reading habits of high-school pupils causes the writer to believe that, as a class, girls read much more than do boys. The type of reading done by girls is mostly fiction, and it has often been noted by the writer that the poor pupils among the girls often read a great deal, poor fiction though it may be that they read. When the story form of literature is very familiar to him, a poor pupil may find it quite as easy to follow the thread of a simple story as does the good pupil. This reasoning is not offered as a valid conclusion.

All the tests show rather high correlation with some phase of school abilities. The problem-solving reading test indicates high correlation with the different groups of pupils in their school abilities, with the exception of ability in English. Theoretically one would expect this. In the paragraph test there is high correlation with all the groups of abilities except that of algebra. The correlation of this test with English is

not so low as that of the problem-solving reading test with English, but is lower than that of the problem-solving reading test in the correlation with algebra. Tables II, III, and IV show that the paragraph test differentiates more sharply the upper and lower thirds of the groups of grades, with the exception of that of the girls, than do any of the other tests. It is seen in Table V that its correlation with the English and algebra grades of the boys is relatively high. In the English grades of the girls of the upper group there is little variation in the correlation of the tests; in the upper group of girls' grades in algebra the paragraph test ranks second in correlation. The information test closely parallels the correlation of the paragraph test in the upper and lower thirds of the different groups of grades, with the exception of the girls' group, in which there is a greater variation. In English in the girls' group the correlation remains practically the same as that of the paragraph test. The narrative test exhibits the greatest variation in correlation, as has been stated before.

In the tests discussed here there are appreciable correlations with the school abilities. It may be argued, that, in the comparisons of the results with the averages of the subjects studied, a fair standard of judgment is not set up on the supposition that pupils' grades in the different subjects may vary widely. It will be granted that there are a few cases of such variation as was pointed out in the discussion as to the choice of English and algebra for special study in these tests. The division into thirds, however, on the basis of the averaged grades of subjects studied represents fairly closely the standing of the pupils in the different subjects. This was verified in algebra and English. In the upper third of the averaged grades of all the pupils there is only one boy that did not have a grade of 80 per cent in algebra, his grade being 75 per cent. The same boy is in the upper third of the boys' group. In the corresponding thirds seven girls did not have a grade of 80 per

cent, and one of these was conditioned in algebra. In the lower third of the averaged grades of all pupils no boy had a grade of 80 per cent in algebra. The same was true in the separate ranking of the boys' grades. The girls had the same record. In English four boys in the upper third of the averaged grades of all pupils and one boy in the like third of the boys' grades did not have a grade of 80 per cent. The girls all had an average of 80 per cent or above in both upper thirds in which they are listed. Two boys and two girls were in the lower third of the averaged grades who had a grade of 80 per cent or more in English. One boy and three girls had a like grade in English in their corresponding groups in the lower third. With the relation in mind that the grades in Latin and science bear to algebra, the comparison of the results of the tests with the averaged grades by division into thirds seems to be fairly accurate.

#### CONCLUSIONS

A large proportion of those who did well in their school work did well in the test, and a large proportion of those who failed in school work were in the lower groups of the tests.

Whether or not these results are valid should be further tested by another set of tests which would act as a check on the results obtained. If the weaknesses of the pupil that are evident in one test are revealed in other tests of the same type, it seems fair to assume that the pupil has difficulty in that respect, and training to remove that difficulty should be given.

It may be lack of mental ability or it may be lack of training that places these pupils in the lower groups of both school grades and tests. At least it is not fair to them to give them what they cannot understand, but what is comparatively easy for most of those in the upper groups.

Greater refinement of the tests will be needed if pupils are to be grouped in classes according to the outcome of tests

in reading ability. The places of the upper and lower groups can be pretty well determined, but the middle groups varied much in ability in the tests. Some of the pupils of these middle groups easily take their places in the upper groups; and some, according to the tests, belong in the lower group. To find adequate tests to discover those who cannot keep the pace set by the best pupils of the school, and yet who are more rapid than the poor pupils, is a task not yet accomplished.

More girls had better school grades than the boys, yet the boys did better work in the tests. This is not understood by the writer, unless it be that tests are more distracting to girls than to boys. In all of the many groups examined by the writer it has been noted that the boys took the tests in a more matter-of-fact way than the girls. From these tests, at least, it seems advisable that the boys and girls should be scored separately in order to set up a fair standard for each.

It is apparent that these results in the tests did not correlate equally with English and algebra. Algebra is more uniform in its demands upon the pupil in the form of reading used. In English all forms of reading are used with varying degrees of intensity in the study of each. To analyze all the types of reading necessary for the interpretative ability demanded of the high-school pupil, and to vary the selections in each of the various types according to the pupil's needs, ought materially to aid them in methods of study.

It does not appear that each pupil's difficulty in the tests is peculiarly individual. The same types of errors recurred in different pupils' papers. No teacher will assert that the majority of failures in school do not fall into classifications of reasons for failures. In the lower groups pupils in the tests did not interpret well what they read, just as they did not interpret well what they studied for classroom work. Further testing will be necessary to determine whether the reasons for the

errors in certain types of reading are fundamental causes of failures in school. It will be more to the point to discover what these reasons are and, by beginning work at this point, see what effect they have upon the pupils' school work.

The same pupils will need to be tested more than once in tests of like difficulty in each of the types of reading to eliminate the element of chance in the results.

Minute analyses of thought-abilities used in each type of reading call for determination before the value of its correlation with school abilities of the pupils can be established.

According to the outcomes of these tests, the problem-solving reading test does not adequately measure pupils' abilities in English; the narrative test fails to correlate to any appreciable extent with the algebra grades, and does not measure girls' school abilities. Also the paragraph test, in its results, and algebra are rather low in correlation. It is to be supposed that it would rank higher in correlation than the information test. No reason can be offered by the writer as an explanation. The reasoning processes in the two tests would need careful analysis to reveal the cause.

The exact significance of the high correlation of the tests with the grades, and the significance of the low correlations, demand further investigation before any general principles can be established.

#### THE PARAGRAPH TEST

##### A FATHER TO HIS FRESHMAN SON IN COLLEGE

###### PARAGRAPH I

Your mind, like your body, is a thing whereof the powers are developed by effort. That is a principal use, as I see it, of hard work, in studies. Unless you train your body you can't be an athlete, and unless you train your mind you can't be much of a scholar. A good part of what you learn by hard study may not be permanently retained, and may not seem to be of much final

value, but your mind is a better and more powerful instrument because you have learned it.

## PARAGRAPH 2

I say, plan to earn your living! Whether you actually earn the money you live on, makes no great difference, though in your case I guess you'll have to if you are going to live at all well. But if you get money without earning it, it leaves you in debt to society. Somebody has to earn the money you spend. If you get it without due labor of your own, you owe for it. Recognize that debt and qualify yourself to discharge it.

## PARAGRAPH 3

If you had come as far as you have in life without acquiring manners, you might well blush for your parents and teachers. I don't think you have, but I beg you hold on to all the good manners you have, and get more. Good manners seem to me a good deal to seek among present-day youth, but I suppose they have always been fairly scarce, and the more appreciated for their scarcity.

## PARAGRAPH 4

You will have to think more or less about yourself, because that belongs to your time of life, provided you are the sort that thinks at all. But don't overdo it. You won't, because you will find it, as all healthy people do, a subject in which over-indulgence tends rapidly to nausea. To have one's self always on one's mind is to lodge a kill-joy.

## THE INFORMATION TEST

## LABOR AND DRINK IN ENGLAND

In England the drinking habits have had the effect of seriously diminishing the output of war materials. In one shipyard a battleship which had been brought in for immediate repairs was held up for a whole day because the workmen went on a drunk. It is impossible in some places to get the workmen to work more than forty hours a week no matter what the need. The loss of efficiency due to drink is on the average estimated at twenty per cent or more. Lloyd George says: "We are fighting Germany, Austria and drink, and so far as I can see the greatest of these three deadly foes is drink." The day after his announcement of a war against drink he received 15,000 letters commending his course.

The action of King George in banishing liquor from his household during the war has been followed by many notables, and there is said to be a decline in drinking at the clubs and restaurants. But the liquor interests are so



strong in British politics, that there is little likelihood that complete prohibition will be adopted, as in Russia. It is possible, however, that the sale of spirits may be prohibited about the armament works. Most of the employers favor this.

#### THE NARRATIVE TEST

Bodies of German cavalry often passed by a great monastery and sometimes their officers were civil to the monks and sometimes not. Then came more cavalry up the winding road, and they were English. The Germans sat on their horses under the cover of a high red brick wall and as the first English patrol approached the Germans fired and unseated some of the English.

There was a skirmish fight and the Germans were driven away, but left one dying man behind, who was brought into the monastery and tended in his last hours by the abbot himself. This German cavalry officer was hardly more than a boy, with many ribbons on his breast. It was Prince Max of the kaiser's blood.

He spoke several times before he died, sending last messages to his people and thanking the abbot for his courtesy that night. In the valley below the priest buried the German princeling secretly. He would not reveal this secret when the kaiser sent word to know the whereabouts of his cousin's grave.

"Tell the kaiser," he answered back, "I will let him know the prince's burial place when there are no more German soldiers in Belgium and when restitution has been made for the crimes against our people."

To this day there are a few people who know where Prince Max lies buried and will not tell.

## THE TECHNIQUE OF SUPERVISING HIGH-SCHOOL PRACTICE TEACHING

WILLIAM S. GRAY

School of Education, University of Chicago

This report presents the results of an investigation which was undertaken to determine the methods which are used in supervising practice teaching. In order to secure a list of the problems which should be studied, a preliminary investigation<sup>1</sup> was made of methods of supervising practice teaching in one university high school. The study showed that the various problems grouped themselves readily about the following points: aims, general requirements, conferences, observations, routine work, lesson plans, actual teaching, the criticism and improvement of class teaching, term papers, and methods of grading.

A questionnaire based on these topics was prepared and sent to more than fifty colleges and universities which provide practice-teaching opportunities. Reports were requested from the general supervisor of practice teaching and from a member of each department which trains teachers. In addition to the information called for on the questionnaire blank, each co-operator was asked to submit a copy of any printed or mimeographed material in use relating to the topics referred to in the questionnaire. If the questions did not cover all important phases of the work of any department, the co-operator was asked to attach a sheet of comments concern-

<sup>1</sup> Each department of the University High School of the University of Chicago contributed very valuable material in this preliminary study. The writer is under special obligation to Ernst R. Breslich of the Department of Mathematics and Charles J. Pieper of the Science Department.

ing such items. In this way it was hoped that definite information would be secured concerning special phases of the problem which have been emphasized in a given department or college.

Seventy-five reports were received representing twenty-seven colleges and universities. The discussion which follows attempts to summarize the most significant facts and tendencies which were revealed in the reports.

#### I. AIMS

The following directions were given concerning the aims of practice teaching: "Read the list of aims of practice teaching given below. Add to this list other aims which you consider important. Check the three aims of the entire list which you emphasize most."

The aims and the number of times each was mentioned in the reports follow:

1. To develop teaching power or ability (62).
2. To learn to select and organize subject-matter (40).
3. To familiarize students with important teaching problems (36).
4. To familiarize students with the needs of the classroom (19).
5. To develop a professional attitude (17).
6. To review and appreciate the significance of principles of pedagogy and psychology (17).
7. To review subject-matter (5).

Twenty-nine aims not listed in the questionnaire appeared in the reports. The majority of these readily grouped themselves into two general classes, namely, to study and develop the personal qualities essential in teaching and to study the values to be derived from the subject.

The reports clearly indicated that the most important aim of practice teaching is the development of the habits and practical adjustments which are essential in effective teaching. A study of principles of teaching and a review of subject-matter do not hold a large place in practice-teaching courses.

## II. GENERAL REQUIREMENTS

Information concerning the general requirements which are made in practice-teaching courses was secured. The following list of requirements includes those which are almost universally required of students early in their practice-teaching courses:

1. Familiarity with the content of all printed and mimeographed material relating to practice-teaching.
2. Familiarity with the content of the textbooks and manuals used by the class, including source materials, illustrative materials, laboratory or other supplies, current literature, etc.
3. A careful preparation of assigned supplementary readings on the content of the course.
4. A clear understanding of the specific objectives or results which are to be secured through instruction during the term.
5. Preparation of a comprehensive, preliminary outline of the term's work.
6. A thorough study of assigned readings on special problems of teaching the course.
7. Familiarity with all the pupils of the class by name, together with a general knowledge of their preparation and individual needs.
8. Command of good oral and written English.
9. Prompt and regular attendance at all class exercises, and conscientious and thorough preparation of all work assigned to the class

## III. CONFERENCES

Five questions were asked in regard to the nature and frequency of conferences with student-teachers. The reports indicated that group conferences of all students under the supervision of a given teacher are held approximately once a week in practically all institutions.

Individual conferences in regard to lesson plans, teaching problems, methods, devices, etc., are held two or three times a week as a rule, or as frequently as may be necessary.

Students are required to attend departmental conferences in about 25 per cent of the institutions which reported. It was

stated in many reports that the plan was approved, but that such conferences were never called, owing to the small size of the departments. Very few institutions require student-teachers to attend the regular faculty meetings of the high school. The plan was heartily approved, however, in most cases.

Typical statements concerning the nature of the general conferences follow:

1. My conferences are chiefly directed at obtaining satisfactory teaching plans in advance of the actual class work. The students' plans are criticized and suggestions for improvement are offered.
2. Conferences consist of round-table discussions of teaching problems, methods of presentation, questions of discipline, lesson plans, etc. Before the student teaches the class he is required to prepare a detailed lesson plan. Each student presents his plan at the conference, and the other students criticize the plan. The teacher who has prepared the plan must be able to answer questions concerning the subject-matter, defend the plan, and give reasons for the particular methods of presentation.
3. Demonstration lessons are given to illustrate special methods of teaching.
4. Students give critical reviews of recitations which they have observed. Important principles of teaching are reviewed in this connection.
5. The strong and weak points in the teaching of the week are discussed, and helpful suggestions are made.
6. Students report on special problems which they have been studying in detail during the past week.
7. The preparation, home conditions, and special points of strength and weakness of individual pupils are discussed. Suggestions are offered in regard to appropriate methods of helping particular pupils.
8. Routine matters for the following week are discussed. Special assignments are made to each student.

It is evident from the foregoing that general conferences are devoted very largely to practical discussions of classroom problems. Theoretical discussions of methodology favored by some supervisors occur very infrequently in general.

## IV. OBSERVATIONS

Information was secured concerning the point of view and practices of various institutions in regard to observations. Practically all co-operators agreed that systematic observation in practice-teaching courses is of great value. In 40 per cent of the cases, however, such a plan was impossible owing to unfavorable conditions in the institution.

The aims of observation were stated as follows:

1. To become familiar with classroom conditions.
2. To learn the methods and devices used by different teachers.
3. To secure concrete illustrations of effective teaching devices.
4. To acquaint students with essential elements of a class exercise.
5. To learn how successful teachers meet and solve problems of class organization and control.
6. To experience and adopt high standards and ideals in regard to teaching.

In most institutions the directions for observations are prepared and supplied by the general supervisor of practice teaching. In only a few cases are special sets of suggestions for observations prepared by special departments. The opinion was frequently expressed, however, that the general directions could be supplemented to advantage by questions concerning teaching problems which are peculiar to special subjects.

Conferences are held after observations in practically all institutions. In a majority of the cases group conferences are held at intervals of about one week for the purpose of discussing observations. In those institutions in which observations are discussed individually with students, the conferences are held not more than a day or two following the observation.

The number of observations ranges from one each day throughout the term to no assigned observations. The number usually varied with the facilities for observations. The

statement was frequently made that well-directed, systematic observations are of so much value that their number should be greatly increased.

#### V. ROUTINE

In order to secure a list of the routine responsibilities which are assigned to student teachers, the co-operators were asked to check on a prepared list the items of routine which are required most and to add others. The following list contains various items of routine in the order of the frequency with which they were mentioned:

1. Giving individual help to pupils in addition to help given in the class-room, explaining errors in written reports, assisting pupils in library work, etc.
2. Assisting in supervised work and presiding over study-halls.
3. Grading work and keeping a record of the grades of pupils.
4. Responsibility for the physical condition of the room.
5. Studying the teacher's system of reading and grading papers.
6. Keeping records of absences and tardinesses; reporting such absences to the office; handling readmission slips presented by the pupils.
7. Preparing sample examination questions.
8. Keeping a record of the amount of teaching done and of the time spent on routine work outside of school time.
9. Collecting and passing papers, distributing laboratory materials, preparing materials for exhibits, orderly arrangement of classroom, etc.
10. Keeping a record of the results of each day's teaching by writing comments on the lesson plans.
11. Examining and checking notebooks.
12. Conducting examinations and grading papers.
13. Assisting in calling and dismissing classes, ringing gongs, etc.
14. Keeping a record of home work done by the pupils.
15. Providing the teacher with a list of needed supplies.
16. Keeping a record of work in the progress book.
17. Keeping apparatus in order and caring for equipment of room.
18. Assisting in demonstrations.
19. Arranging illustrative material.
20. Keeping in close touch with pupils to gain a knowledge of their point of view and of their needs.



## VI. LESSON PLANS

Lesson plans are required in all practice-teaching courses. As far as possible the supervisors of practice teaching insist that practice in plan-writing be made prerequisite to practice-teaching courses. Where such preliminary training has not been provided, students are given model plans and are required to write several plans before they are permitted to teach. In practically all institutions some type of lesson plan is required for each lesson taught. Each plan or outline which is submitted is corrected by the supervisor and returned with corrections before the lesson is taught. In 60 per cent of the institutions students are permitted to submit general outlines of the lessons in place of detailed plans as rapidly as they demonstrate teaching skill. In about 40 per cent of the institutions a detailed plan is required for each lesson in order to promote the habit of preparing each lesson thoroughly.

## VII. ACTUAL TEACHING

Two plans are followed in introducing student teachers to teaching responsibilities. In a majority of the institutions which reported, students are asked to assume charge of a class at the beginning of a course or within a very few days. Those who follow this method believe that better results can be secured by imposing large responsibilities at the beginning. Those who believe that it is advisable to allow the student to develop power and confidence before he assumes full responsibility of the class pursue the following plan:

1. The student-teacher does no teaching of any type until after a week or two of carefully directed observations.
2. The student-teacher then assumes minor teaching responsibilities such as making announcements and making reports on assigned home work at the opening of the class hour, first in the presence of the supervising teacher, later during his absence.
3. The length of the period during which the student-teacher has entire control of the class is gradually increased. Following the types of work

mentioned above, the student-teacher may present a subtopic requiring from ten to twenty minutes. Later on he teaches entire periods.

#### VIII. CRITICISMS OF CLASS TEACHING

The reports contained three types of information in regard to the criticism of class teaching: (a) the standards by which teachers judge the quality of class teaching; (b) methods of giving criticisms; and (c) methods of securing growth on the part of student-teachers.

The standards for judging the quality of teaching which were submitted were so different in form and content that it was impossible to summarize them effectively in a general statement. They readily grouped themselves, however, into three general classes. The type which was reported most frequently consisted of a series of ten or more questions relating to important phases of teaching. The following questions were submitted by one supervisor:

1. Does the teacher find and state the purpose of each lesson unit?
2. Do the pupils find and state the central problem idea, law, etc.?
3. Does the teacher have the relationships of the subject clearly in mind?
4. Is the teacher able to rearrange the subject in a psychological order or presentation?
5. Does the teacher follow the general plan approved in the conference?
6. Does the teacher think out the key questions in advance of the recitation?
7. Does the teacher adapt the material and methods to meet individual needs?
8. Does the recitation provide for real thinking?
9. Does the class display genuine interest?

The second type consisted of an outline of topics similar to those included in Boyce's *Record of Teaching Efficiency*. The number of topics in a report ranged from five to forty or more. The following topics are typical of those included in the briefer reports: (a) personality; (b) ability to discipline; (c) ability to instruct; (d) results obtained; (e) attitude toward supervisors.

The third type included questions concerning the technique of teaching a given subject. Only a few such reports were submitted, inasmuch as most teachers of special subjects sent in outlines relating only to points of general methodology. It was evident, however, that considerable attention should be given to teaching problems which are peculiar to the subject which is taught.

A considerable number of the reports emphasized the value of judging teaching on the basis of the results secured. In this connection a distinction was advisedly drawn between measured results and observed results.

A careful consideration of all of the suggestions which were submitted lead to the tentative conclusion that the quality of a teacher's work may legitimately be judged from the following points of view:

1. By the results which are secured, including both the measured and the observed results.
2. By the extent to which the general principles underlying effective teaching are observed.
3. By the extent to which the most effective methods and devices of teaching a special subject are followed.

The reports contained somewhat uniform suggestions concerning methods of giving criticisms. They were summarized in terms of the following statements:

1. The lesson is usually discussed in the light of certain standards which have been previously discussed and adopted.
2. The teacher has a conference with the student as early as possible after a recitation. Only in very rare instances are criticisms given during the course of a recitation or in the presence of pupils.
3. The conference usually takes the form of a discussion in which the student is encouraged to evaluate his own teaching. The discussion is frequently initiated with favorable comments by the teacher or with questions which center the student's attention on significant phases of the recitation.
4. The discussions emphasize both favorable and adverse points. The causes of the weaknesses are determined, and methods of improvement are discussed.

5. Only a limited number of points are discussed in a given conference. Long discussions covering a large number of points lead to confusion rather than growth.

6. The suggestions which are worked out in the conference or which are submitted by the supervising teacher are written in permanent form. One copy is given to the student, one is filed in the office, and one is kept by the teacher.

The following methods of securing growth on the part of student-teachers were mentioned in the reports:

1. Students are supplied with specific references, with definite outlines, and with concrete suggestions and devices for teaching.

2. Provision is made for a large amount of initiative and freedom in trying out new methods and devices.

3. Copies of rating scales are given to students, who grade themselves and keep records of their progress.

4. Students are required to concentrate on one or two problems each week and to prepare a written report concerning the means employed in solving the problem, the obstacles encountered, and the success attained.

5. Students are not allowed to remain with a given teacher for more than two months, provided there are several equally well-qualified teachers available.

6. Students are encouraged to go to the teachers for help whenever they feel a need for advice.

7. Teachers present high professional standards to students, and exemplify them in their own teaching.

#### IX. TERM PAPERS

Term papers are required by fewer than 20 per cent of the teachers and supervisors who submitted reports. The following types of term papers or reports were mentioned: (a) an outline of the semester's work; (b) answers to the following questions: In what respects have you received help? In what respects would you like more help? What, in your judgment, would improve the course? (c) a summary of the main points which have been emphasized in regard to teaching; (d) a written report of the term's work or, better, of some special problem of the term's work, such as an article for the state teachers' journal; (e) a paper on some problem of teaching. The purpose

of a term paper is "to provide opportunity for training in looking up relevant materials, and in thinking and forming judgments for oneself."

#### X. GRADING

The teachers and supervisors who co-operated were requested to submit copies or written descriptions of their grading plans. In 60 per cent of the reports no reply was made to this inquiry, indicating that no definite plan other than the general impression method had been formulated. In 20 per cent of the reports the statement was made that no formal analysis of the grades is made, inasmuch as the teacher grades on the basis of his general impression of the student's work. The following statement is typical: "No formal plan is used. The supervisor hands his estimate of the student's work to the director. This estimate is expressed in letters according to the Missouri system of grading."

Fifteen plans were submitted which are in use in different institutions. These plans vary in content from a brief statement of the strong and weak points in teaching to a detailed analysis of the teacher's work such as is possible with Boyce's *Record of Teaching Efficiency*. The need is expressed frequently for a rating plan which secures a detailed, graphical, impersonal record of a student's work.

Time will not permit further discussion of the various grading plans in use. Numerous progressive tendencies were revealed in the methods employed in a large number of schools. Those who are interested in this problem are advised to secure copies of the Boyce *Record of Teaching Efficiency* and of the grading plans used in the following institutions: University of Wisconsin; University of North Carolina; University of Minnesota; Leland Stanford Junior University; Ohio Wesleyan University; and St. Olaf College.

## SUGGESTIONS FOR THE ENGLISH COURSE IN THE JUNIOR HIGH SCHOOL

WALTER BARNES

Head of English Department, State Normal School,  
Fairmont, West Virginia

Now that we have the junior high-school organization, let us have the junior high-school course of study.

The creation of the junior high school as a distinct section of the public-school system was brought about for good reasons—reasons which now seem very obvious. We have established and are establishing the junior high school, but already we are forgetting the reasons. In fact, many people never knew the reasons. The new plan had the indorsement of eminent educators, it was something novel and attractive, and—anything was better than what we had had. Accordingly, all over the country junior high-school buildings were thrown together, junior high-school principals and teachers selected, systems of grading and promotion installed, and presto! behold a junior high school! It is not too much of an exaggeration to say that in the judgment of most persons a junior high school exists when we have special teachers for the various subjects, when children troop from one classroom to another, when the discipline is somewhat relaxed, when some of the manual arts are introduced into the curriculum, and when the two or three years of the course are fenced off into a corral of their own. This is but the veriest shell of a junior high school, the mere framework. Unless the underlying conception of this section of the school system, the spirit, the purposes, the course of study, the methods, are vastly different from both the former “upper grades” and the senior high school, we do not have a junior high school; and we are certain to have, within a few years, the stultifying, stupefying formality of the old-time “grammar school.”

It is not my purpose in this paper to outline a year-by-year course of study for the junior high school. I wish merely to indicate what are some of the principles that should be accepted as guides in the formulation of a course of study in one of the important subjects: English. It is highly desirable that we examine this important subject at this time, while the junior high school is still in a formative state. English is one of the studies brought over from the old régime to the new, and the tendency is to teach it in the old fashion—pouring old wine into the new bottle. Now while the new school organization is still flexible, still plastic and malleable, we should reconstruct our course in English. If we wait until the new idea becomes rigid—as it undoubtedly will—we shall find it a more difficult task to expand, compress, and remold our course in English. Unless we transform this time-honored subject and prune away the formalities and traditions that have wound themselves around our materials and methods, unless we animate our English with the same creative spirit that called into being the junior high school, we shall be missing our golden opportunity. Shall we tear down the old structure and erect a new one, then instal in it the furniture and furnishings of the earlier building, broken and yellow with age?

If we do remodel our course in English and make it accordant with the new system of organization, we must adopt as our directive principle the same principle that led those who constructed the junior high school: *follow nature*. The eight-four plan has been given up because it did not conform to the needs of children, did not adapt itself to their nature. The six-three-three plan is undeniably more in accordance with the change and growth of children; it recognizes more clearly and meets more adequately their disposition, their temperament. The proper course in English in the junior high school is one that is based on the qualities, the characteristics, the peculiarities, the interests, of children of the junior high-school age.



Manifestly our first problem is to comprehend the child in this stage of his development, to discover what are his tastes, inclinations, notions, ideals, instincts, and powers; having done this, we are ready to plan for him a course in English.

Fortunately, we have available a store of trustworthy knowledge concerning the physical, intellectual, social, and psychical nature of the children at this age. (I am not certain but that we have too much; less of scientific knowledge and more of sympathetic insight and imagination would enable us to enter into more intimate understanding of child nature.) There remains, then, the not difficult task of determining what bearing each basic tendency and desire in the junior high-school children has upon the activities in English during these years. Dismissing from our mind all memory of what the English course for the seventh, eighth, and ninth grades has been, looking not at the details of English that we conceive it necessary to teach in this section of our school system, but focusing all our attention on the children themselves, we will base all the content and the method of English on what actually and verily is demanded by the nature of the pupils. Thus and thus only shall we have a genuine junior high-school English course.

I set forth below what I conceive to be the ten most significant qualities or traits in children of the junior high-school age, then indicate what seem to be the implications for the formulation of the English course. I disclaim all intention of formulating the course; I hope merely to point out some of the stars by which we may steer.

*First statement.*—This is the period of the discovery and the development of personality, the period when one temperament begins, definitely and decisively, to diverge from others. Up until now the children have been traveling the same road—at different gaits and rates of speed, of course, with different aims and purposes, but still the same road; now the road begins to fork, and each child travels toward his own goal.



First suggestion: The individual reading method must now supplant the class method. Instead of all pupils reading the same poem or story, each child is now given an opportunity of choosing themes and forms and types of literature to suit his taste. The recitation hour is devoted to discussions of books read, interchange of opinion, discovery of canons of taste and of literary art, correction of false impressions, and occasional reading aloud of passages that are worth reading aloud. Each child is encouraged to cultivate the field of his reading interests; the teacher's task is to direct him to the best literature in that field, to improve his taste and his method of reading.

Second suggestion: In composition work each pupil selects his own themes and forms. One invents stories, one writes business letters, another makes speeches, each according to his proclivities, each driven by his own impulses—the teacher, of course, seeing to it that no form of expression absolutely indispensable to the average citizen in a democracy is utterly ignored.

*Second statement.*—This is the period of fluctuation, of shifting, veering interests and ambitions. The child begins to try himself out, to experiment, test his wings. He is fickle, changeable, “everything by starts and nothing long.”

Third suggestion: In literature and in composition the junior high-school pupil should have opportunities of testing himself out, of tacking and sailing hither and yon. He should be encouraged to range widely, to read this author for a time, then forsake him; he may be expected to hate the things he formerly loved and to love the things he formerly hated. He should not be required to “study” one author for a semester or spend two months in intensive reading of one book; he should not be asked to tell stories or write explanations for a long stretch of time. Infinite variety is the keynote of the course in English for this period. If the English course does not enable the child to secure some help in the important ven-

ture of self-discovery, then it has failed in one of its paramount functions.

*Third statement.*—This is the time of gregariousness, of the gang-spirit, of the formation of social groups, of leadership and discipleship. The public opinion of the group is now the most potent influence in decision and action. Work and play are now carried on through plebiscitary agreement; clubs, teams, societies, spring into being.

Fourth suggestion: Projects of diverse kinds should now be features of the English work. Literary societies may be organized and school papers published. The socialized recitation is the natural means of conducting both literature and language work. If the pupils are given a voice in their own government (and the logic of the situation demands that they should be), they will discuss and debate school activities, procedure, programs; and committees may be intrusted with authority and responsibility. The prevailing types of discourse springing from this instinct are the conversation, the discussion, the speech, the debate, and other oral forms, since these are the molds into which social expression pours itself; but the social letter, written to an absent friend, is natural and easily motivated.

*Fourth statement.*—The junior high-school age is the "age of heroes." Both boys and girls come under the domination of strong personalities who embody the qualities the children most admire. Ideals as abstract concepts have some influence in the senior high school; but in the junior high school what counts most is ideals incarnate in men and women. And the hero of the child of this age is nearly always of the active type, as distinguished from the intellectual type. It is not poets, teachers, and statesmen who are the idols of this time; it is the warrior, hunter, Red Cross nurse, explorer, captain of industry.

Fifth suggestion: A goodly portion of the reading in the junior high school should be biography and history and legend: Achilles, Samson, Hercules, Theseus; Alexander, and Caesar; Roland, Beowulf, King Arthur, and Robin Hood; Nelson, Napoleon, and Washington; Boone and Crockett; Stanley, Peary, and Roosevelt—men of the virile, adventurous type, doers of great deeds, objectifiers of ideals of courage, constancy, patriotism, honor, chivalry, magnanimity, truth, and justice. Some themes for the composition work may emerge out of this reading and the subsequent discussion, but forced, formal expression dulls the edge of enjoyment and makes insipid and commonplace the boldest exploits of heroism.

*Fifth statement.*—This is the “showing-off” season.

Sixth suggestion: The teacher should provide an audience for all expression. This necessitates a larger ratio of oral language. Written work should be read aloud to the class, read by a committee, passed around among the members of the class, displayed on the wall, printed in the school paper, or in some other way given publicity.

Seventh suggestion: The “showing-off” instinct sometimes manifests itself in the desire to add new words to one’s vocabulary. There are, I conceive, three natural periods for learning new words: early childhood, preadolescence, late youth. In the first, pleasure in mere sounds and in the manipulation of one’s vocal mechanism is the animating impulse; in the last period, it is the intellectual pleasure involved and the consciousness of the profit it will bring in approaching manhood or womanhood that inspires some children—the more serious and the more literary-minded ones, at least—to an interest in words. In the junior high-school period new words, especially richly connotative words—slang, homely idioms, picturesque phrases from literature—appeal to many children because they enable one to “show off” effectively. This is a good time, therefore, for the teacher to make a conscious effort—though

not too obvious an effort—to enlarge and enrich her pupils' stock of words.

In general, it should be kept in mind that the "showing-off" tendency, while it must be kept in bounds, is one of the strongest instincts and most useful instincts in childhood and in manhood. Only the foolish teacher attempts to suppress it; the wise teacher uses it as a means of teaching.

*Sixth statement.*—During this period comes a recurrence of the romantic, the imaginative outlook on life, a craving for that which is bizarre, fantastic, mysterious. The child who at six or seven years of age reveled in his Grimm, Lang, and Jacobs and then lost his taste for such "silly stories" now turns to *The Arabian Nights*, *The Rose and the Ring*, and Stockton's *Fanciful Tales*.

Eighth suggestion: In their reading the children of junior high-school age should be encouraged to run at large over the enchanted region of Munchausen, Barrie, Macdonald, Ingelow, Craik, Baum, Stockton. *Tanglewood Tales* and *The Wonder Book*, *The Ancient Mariner*, *Tales from Shakespeare*, the *Jungle Books*, Jules Verne, and Rider Haggard now claim our pupils' eager attention out of school, hence should be given recognition in the English course in school. The more mature boys and girls should now receive introduction to Dumas and Scott, Cooper and Stevenson, and the other romanticists.

Ninth suggestion: In their theme work the children should be allowed to give expression to the romantic and fanciful ideas that well up within them. Trips to the moon, fanciful autobiographies, fairy tales, dream stories, make-believe travels, all are natural to this period of childhood. Up until now the children have not had pinions broad and strong enough for such flights, and a little later on they will turn up their serious noses at such puerilities, but now

Ever let the fancy roam,  
Pleasure never is at home.

*Seventh statement.*—During this period the boys become increasingly impatient of forms and conventions, in manners, clothes, and language. They have the scantiest regard for the niceties of style; they admire force, naturalness, freedom, picturesqueness, in their own language and in what they read. (I am not so sure about the average girl. It would seem that those girls who have had held before them ideals of ladylike deportment and elegant manners become, during this period, devoted subjects of My Lady Etiquette.)

Tenth suggestion: Close analysis of style and worship of standards of elegance, purity, and prettiness of diction are out of place. James Fenimore Cooper, though he break every commandment in the literature decalogue, is more in favor at this time than Addison or Irving. It is content that counts; the boys want reading with substance. The poetry most popular during this period is of the narrative sort—direct and forward-moving.

Eleventh suggestion: The natural language of children on this plane of their development is colloquial, idiomatic, free-and-easy, rough-and-ready. Ideals of correctness and propriety should be advanced with prudence, tact, and common-sense.

*Eighth statement.*—Running counter to the trait just discussed is the strong curiosity in children of junior high-school age to "know why." Throughout the elementary school they are, for the most part, willing to accept *ex cathedra* rules and regulations; now they want to know the reasons underlying them. Until now they have acquiesced in the teacher's pronouncement that "It is me" is wrong; now they are likely to say: "You tell us 'It is me' is wrong, but almost everyone says that; why is it wrong?"

Twelfth suggestion: Functional grammar can now be justified. Knowing why will not guarantee correct language; only language activity under guidance will secure that; but knowing why proves an ally in any good-language campaign

among junior high-school pupils. It must be realized, however, that the curiosity concerning language laws is often languid, and that a heavy course in the traditional technical grammar, the ugliest and unwieldiest piece of furniture in the "upper grades," must not be installed in our new junior high school.

*Ninth statement.*—During this period certain reachings-forward to the occupations and activities of youth and of manhood and womanhood manifest themselves. Boys are concerned about earning money, about business careers; girls, about clothes and homemaking.

Thirteenth suggestion: Some of the reading for the junior high-school boys may well be in such stories and sketches of business and civic life as are found in the *American Magazine* and other publications. As for the girls, the popular women's magazines will supply plenty of useful and pleasant material on styles and housekeeping. This is not literature and should not be treated as literature, but it should be part and parcel of the English course.

Fourteenth suggestion: The business letter, commercial forms, the report, the explanation, may now be easily motivated, and the necessity for correct spelling and punctuation, logical paragraphing, and clear, straightforward statement may be made more evident. The girls will find abundant material for description, exposition, recipe, sketch, and demonstration-with-talk in various phases of fashions and cooking. One of the most animated and effective descriptions I ever heard was given quite impromptu by a junior high-school girl, starting with, "Oh, I saw the prettiest dress at H——'s the other day." There is no reason to look down upon this kind of subject or to poke fun at it; if we are to have real expression (and nothing but real expression can be made the means of securing training and improvement in language), we must allow the children to speak and write of their native interests and their experiences.

*Tenth statement.*—Children of this age are usually very sensitive.

Fifteenth suggestion: The utmost care must be taken in criticizing language and composition work. Children a little younger may be more or less indifferent; children a little older can arm themselves with the reflection, "The teacher's an old crank, anyway"; but children of junior high-school age are too nakedly egotistic to endure the keen winds of criticism. The good teacher will make the atmosphere of the English class wholesome and inspiring, and will teach through success, not failure.

These, of course, are not all the traits, the characteristics, the interests, of junior high-school boys and girls. The faint beginnings of the sex instincts, for example, so important in the senior high school, must be reckoned with here, but, so far as I can determine, all that the English course can do to recognize and meet these instincts is to provide plenty of good, wholesome reading: love stories and poems, in which love is idealized and refined. Other traits of character, with their corollary suggestions, might be discussed. But those discussed above are, I believe, the most significant. It seems very evident that if our junior high-school English work were based on the fifteen suggestions given, we should have a very different course from that given in the upper-grade system of the past and in many of the junior high schools of the present, and a course much better designed to fit the needs and nature of young people at this stage of their development.



## THE PITTSBURGH CO-OPERATIVE PLAN

EDWARD RYNEARSON  
Fifth Avenue High School, Pittsburgh

There are many so-called co-operative plans. A genuine part-time course is well illustrated by Cincinnati's co-operative plan organized in 1906, by the Fitchburg part-time plan organized in 1908, and by modifications of these used in other cities. This type of course is capable of being adapted in such a large variety of ways that it will ultimately be adopted by many schools. Almost any school could introduce a part-time co-operative system wherever two boys could be "paired" and one employer could be found who would take them alternately.

Most of the part-time co-operative schools have been organized to co-operate with the industries of the respective communities. There are many advantages to the employer, to the pupils, and to the schools. The employer will secure a higher class of workmen. That his motive is selfish makes it no less commendable. The boys, by being in school part of the time, will be able to get more individual instruction in the theory of the trade and probably by better teachers than the boys who spend their entire time in the shop.

Many a pupil will derive more profit from both work and school than if he were doing either singly. Since a dominant characteristic of the adolescent is a desire for creative or constructive activity, he will take a deep interest in the work. Likewise he will go to school regularly and with more earnest purpose in order that he may get as much help as possible for his work, because he sees for the first time a real connection between school and life.



The plan is economical for the community. In the Centralia Township (Illinois) School the pupils on the part-time plan use machine-shops that cost the Illinois Central Railroad over \$500,000. The cost of the upkeep and of the replacement of this equipment, as soon as it becomes obsolete, is met without any expense to the township. The boys like the atmosphere of the real shop. In addition the remuneration gives *all* a feeling of independence that is worthy of encouragement and enables some to continue in school who otherwise would be obliged to leave school to assist in bearing the expenses of the family.

The part-time plan of education will meet the demands of the 50 per cent of the children of the eighth, ninth, and tenth grades who desert the school early. They often feel neglected and become discouraged in the all-time school because it is frequently based upon a plan of work for groups. These discouraged pupils must have their individual needs considered, as is more often done in planning courses of study for the evening and part-time schools. However, the evening school, popular and desirable as it is, is often too great a physical tax upon the vitality of the growing youth.

While most co-operative schools are linked up with shops, the co-operative, or part-time, plan has been successful with commercial subjects in a few schools. Last February the Peabody and Fifth Avenue high schools in Pittsburgh put the pupils of their commercial courses on half-time during the last semester of the Senior year. The pupils were "paired" and sent on alternate weeks to certain of Pittsburgh's representative firms. These firms, the Joseph Horne Company, the Pittsburgh Coal Company, the Equitable Insurance Company, and the H. J. Heinz Company, were carefully selected that the pupils might not be exploited. The pupils worked with the same firms during the entire semester. At a meeting of the managers of these firms before the plan was

put into operation, a uniform scale of wages of seven dollars per week was agreed upon. As has been stated, the firms selected to inaugurate this plan in Pittsburgh were those which we knew had sufficient civic spirit and vision to do everything to assist these boys and girls to get as much and as varied training as possible from the different kinds of work; that is, the pupils were not kept at one kind of work for the entire period. The pupils sent to the Joseph Horne Company, one of our large department stores, were given opportunities to work behind the counters in selling real merchandise to real customers as well as to write real letters, and to handle checks that had face value. This vitalized the study of salesmanship, stenography, and bookkeeping.

One of the surprising and gratifying results was that practically the same amount of school work was completed as in former years, although these pupils do not recite with the full-time classes. Each high school had an entire section of the graduating class using this plan. During the present semester, when the stores do not open until ten o'clock, pupils from the Fifth Avenue High School were at school during the forenoon and reported to the store at one o'clock. As a rule, the firms prefer to have the pupils on the alternate-week plan rather than the half-day plan.

Some new problems of administration must be met. There must be co-operation between the school and office in order to arrange about wages and time, to secure records of pupils' work, and to correct any deficiencies that are revealed by this practical work. By the shifting of teachers on alternate weeks from one building to another according to the shift of pupils, instructional energy might be saved.

No better laboratory could be furnished than actual office work. Pupils see that the rules of school, often regarded as arbitrary, are the rules that are observed in the business offices. They are impressed, as the school could never impress

them, with the importance of accuracy, of speed, of regularity, of punctuality, of seriousness, and of many other requirements of the business world. Each week many suggestions helpful to the teacher are brought back by the pupils. Teaching pupils who on alternate weeks are in touch with newest methods in the various offices prevents <sup>at</sup> most any teacher from falling into a rut or growing stale in his subject.

That the part-time school does appeal to the class of pupils who drop out of school is also proved by the fact that the field secretary of the department of vocational guidance and his assistant, with an office next door to the office where working certificates are issued, were able in two months to turn one hundred "drop-outs" back into the part-time course; and this, too, after the disgruntled boy or discouraged girl had obtained a certificate from the principal of the school and a promise of a position in an office, store, or shop.

The American Locomotive Company of Pittsburgh, recognizing the need of better-trained men for the skilled industries, has agreed to a plan that will present to high-school entrants not only a high-school education and self-support after the first year, but also a definite objective in terms of a skilled trade, journeymanship, and journeymen's wages. The plan is organized on a five-year basis. The entire first year will be spent in the high school, the second, third, and fourth years on an alternate-week basis, and the entire fifth year in the plant. The entire vacation may be spent in the shop. Upon completion of the fifth year, if the work has been satisfactory, diplomas will be granted by the Board of Public Education and a certificate by the industrial plant.

Co-operative plans in one form or another are used in widely separated sections. The usual plan is for the principal, teacher, or vocational counselor to find a place where pupils may work part of the time while going to school. The school

and the employer co-operate to solve or adjust each problem as it presents itself. In many schools in which the co-operative plan has been tried there has been no individual or group of individuals who makes a scientific study of the problem as a whole. Department stores all over the country realize that they do not get enough of the kind of people in the selling or non-selling positions who can be promoted to the executive positions. These higher places are often filled by people who have been taken from some other line of work in which their executive ability has attracted attention.

Last May representatives from the largest department stores of Pittsburgh met with representatives from Carnegie Institute of Technology, from the Board of Public Education, and from the administrative department of the public schools; seven of these agreed to support a Research Bureau for Retail Training. Three aims are kept in view: (1) to give professional training to those planning to enter the field of retailing and to those who desire to become more efficient in the field; (2) to train special teachers and supervisors in this field; (3) to conduct investigations for the improvement of methods of selecting, training, and supervising employees in retail stores. In other words, the broad purpose is to encourage a more professional spirit in the field of retailing.

When this opportunity for the boys and girls of Pittsburgh was first proposed, many teachers and citizens said: "You surely are not going to encourage the graduates of your high schools to enter the department stores, are you?" Here crops out the conservatism of the teaching profession toward educational matters. Every subject when first introduced into the course of study has encountered bitter opposition from teachers. Some of us remember when teachers resented the introduction of United States history into the course of study. Many teachers of the classics even today look askance at teachers

and pupils who dare make any claim for the sciences. We all know the battle that the so-called industrial subjects have waged, and are waging, in many communities.

Many do not realize that the retail store demands the very highest ability in its many different kinds of activities. Those interested in vocational guidance may not realize that probably no other employer can offer positions requiring such varied ability as does the department store. We are likely to think that the selling positions are practically the only kind of work in these stores; we do not know that there is an equal number of persons in the non-selling positions doing the important work essential to keep the organization efficient. The department store is a small city in itself.

In one of the department stores in Pittsburgh there are over one hundred persons who receive \$4,000 or more per year. The great demand for more intelligent men and women in the selling and administrative departments caused these business houses to ask aid from the practical psychologists. As a result of serious study of the situation, the seven retail department stores of the league have agreed to contribute \$32,000 a year, or a total of \$160,000 for five years, to study the educational problems of the entire system from the humblest employee through to the highest official. This will bring over into the field of retailing the results of the study of personnel problems which have been attained by the original Bureau of Salesmanship Research at the Carnegie Institute of Technology. It will utilize the work of the men of this bureau in connection with the personnel organization of the American army.

The most important new feature of the work is the attempt to make a thorough, scientific study of the methods of selecting, training, and supervising employees in both the selling and the non-selling forces of the department stores. In October a training course for workers in the employment, educational, and service departments of large stores was

begun. A generous number of 500-dollar scholarships and fellowships were given to able college graduates selected by the staff. On this staff are its director, Dr. J. B. Miner, who during the war has also been acting head of the Division of Applied Psychology; Dr. G. M. Whipple, an expert in experimental education, as consultant; together with Mr. W. R. Skillen, an expert in department-store work from Wanamaker's Philadelphia store; Miss Marion L. Norris, Marshall Field & Company and Charles A. Stevens & Brothers, of Chicago; Miss Elizabeth Dyer, expert on salesmanship courses, formerly assistant director of the Prince School of Store Service in Boston and, later, educational director at Rike-Kumler Company, Dayton; and Dr. David R. Sumstine, principal of one of Pittsburgh's high schools, consultant in regard to high-school courses of study.

Does not this show to what extent these business men believe in training? When they are willing to back up their convictions with their money, it certainly behooves those of us who are interested in education and in educational experiments to co-operate to the fullest extent.

Any pupil of the seventh or eighth grade who has been accepted by any of the co-operating stores may enter this school. Any pupil who has completed the eighth grade may enrol in the co-operative course in high school. The pupils who enrol will attend school in alternate weeks. The state authorities have decided that children of the part-time school should have a vacation-work certificate. If there are not enough pupils in any high school for the co-operative retail course, those who wish to pursue this course will be cared for at a downtown class until there are enough for any school to be provided for at that school.

The course of study for the non-office work has been planned for the first year by a group of five high-school teachers and the staff of the Retail Bureau. The subjects are English, arithmetic, general science, color and design, and store organi-

zation and practices—all related to the needs of the retail store. The course for the second year will include subjects technical enough not to duplicate the present courses in high school, and broadening courses related to life: life-problems, the technique of selling, and merchandise.

The aims for the course of study for the high school will include: (1) the use in certain high-school subjects of material with which the pupils in the retailing course would naturally have to deal in their business relations; (2) some technical work related directly to the stores, as indicated by the subject of store organization; (3) a very definite attempt to keep a broad vision for the pupils by relating these business courses to the fundamental, moral, scientific, and artistic conceptions in life.

The pupils will receive a compensation for the days spent in the store. Caution has been taken that the pay for the part-time work may not be so high as to make the plan too attractive financially to school children. The thought back of the business and professional men is that for the children this is an educational, not a financial, project. In fact, some of our best technical schools are now requiring actual experience in industrial life before graduation. Dean Schneider acts on the principle that theoretical instruction given to the students should be employed to illuminate, supplement, and interpret real shop or other practical experience. Mr. Miles, of Wisconsin, says that in some cities the employers pay the boys on part time as much as they do the boys who work all the time. They say that boys who are going to school do twice as much work in the same time as boys who are not in school. Too many of our boys stop growing intellectually before they have stopped growing physically.

In order to call attention to the advantages of this co-operative plan to the parents and children, the co-operating stores inclosed with the December statements a circular which



set forth the principal features of the course. Parents and pupils were urged to make further inquiry about the course.

Most of the inquiries received in response to these circulars may be grouped under one or more of the following questions:

I. What are the advantages of a part-time vocational educational plan?

II. For what young people is the part-time plan of vocational education particularly valuable?

III. How is the co-operative arrangement between the Pittsburgh public schools and the large department stores administered?

In a pamphlet prepared by Associate Superintendent Frank M. Leavitt and published by the Board of Public Education these three questions are fully answered as follows:

#### I

The advantages of a part-time vocational education to the young person who follows this plan are as follows:

*a)* Not only does the young person secure a good position with promise of future promotion, but he receives training for the work which he is doing. A part of this training is given in the place where he is employed and a part of it is given in the public school.

*b)* Whether at school or at work the young person is under the care and supervision of the public educational authorities.

*c)* The young person may begin to contribute to his own support while he is still in school securing an education.

*d)* To many pupils the practical work serves to explain the school work and to make it seem more vital and more important. In some cases pupils who fail to appreciate the educational opportunities offered by the regular full-time school work become at once faithful and diligent students on entering the part-time class.

*e)* The plan will start the young worker in the right way by showing him that it is worth while to study the occupation in which he is engaged and that such a study of the opportunities of the vocation will certainly advance him in his life-work. Few people are making substantial progress in their daily occupations who are not studying in some way to improve themselves and their work.

*f)* Boys and girls will have an opportunity to find themselves—a means of vocational guidance.



It will thus be seen that the part-time co-operative plan of vocational education offers many advantages over full-time work and even over full-time education for some young people.

## II

The part-time plan is particularly valuable for two groups of pupils:

First, there is that large group dropping out of school each year. In the city of Pittsburgh during the school year of 1917-18 between September 1 and April 30, 598 children left the public high schools alone, dropping out from first-, second-, third-, and fourth-year classes without completing the course of study. During this same interval 870 pupils between fourteen and sixteen took out working certificates from the seventh and eighth grades of our public schools. Practically all of these young people would have received great benefit if they could have continued their education on a half-time plan.

Second, there are many young people now in the high schools who have no intention of going to college and no clear idea why they are going to school. Some of these young people are not succeeding entirely with their school work largely because they do not apply themselves with the energy which should be shown by young people of high-school age. It is actually harmful for such boys and girls to loiter through high school putting forth only half of their natural powers. Part-time education for many such children will improve their school work immensely.

What are the educational qualifications for the various divisions in these stores? The co-operating stores reported to the Research Bureau the amount of schooling of their present employees. In all the stores 77 per cent of the employees under twenty-three years of age have never been in high school; the number varies from 69 per cent to 82 per cent. Forty-four per cent, or nearly one-half, left school during, or at the close of, the eighth grade.

At the same time the stores gave this information they also reported the probable number of pupils who can be taken into the store on the part-time plan. One store reported that 446 pupils could be placed as follows: first year of high school, 67 girls and 42 boys; second year, 58 girls and 23 boys; third year, 66 girls and 56 boys; fourth year, 39 girls and 24 boys; 375 altogether, or 85 per cent, from the high-school grades.

At present only 22 per cent of employees of this store under twenty-three years of age have been in high school, and 85 per cent of these did not enter the third year. Statistics in this case, show the opportunities open to our high-school pupils on the part-time plan.

### III

Any pupil of the Pittsburgh Public School who enters upon part-time work in one of the co-operating department stores is under the immediate care and supervision of the public-school authorities. The progress of his work both in the school and in the store is a matter of school interest and school record, as are also his health, his attendance, and his deportment.

In addition to the supervision by the public-school authorities, the young people will be observed and supervised, and to some extent instructed, through the work of the Research Bureau for Retail Training. This bureau employs a professional staff and conducts, in connection with the Carnegie Institute of Technology, a class in the study of the problems of retail business and especially the problem of training department-store employees. These college students are in constant contact with the part-time pupils from the public schools. The Research Bureau affords a group of specialists which will constantly observe and improve the entire plan. One of the main difficulties with the co-operative courses in other cities has been its lack of such a body constantly to watch and direct the plan.

Briefly stated, the Research Bureau for Retail Training, backed by seven stores for \$160,000 and by the facilities and equipment of the Institute of Technology, has five years in which to experiment with the co-operative plan under the auspices of the public schools; many part-time plans have lagged in other cities because there was not a sufficient number of co-operating employers; under our plan there is a greater demand for part-time pupils than the schools can supply, 1,700 altogether; the pupils will have expert supervision both in the selling and in non-selling positions; the conditions of employment will be made as favorable as possible to the educational growth of the pupils; the children will be on an advancing scale of wages during their course according to grade in school and years in service (this will show, in a con-

crete manner, that an additional year of schooling means a higher wage); pupils and parents will take more interest in an education that links up intimately and immediately with actual work; many pupils will be able to remain in school on account of financial aid received for the weeks spent in the stores; meeting prospective customers and mingling with all classes of people will give a real basis for the study of salesmanship and other subjects taught in their classes; the retail store will be a real laboratory equipped with people, material, and actual conditions such as could obtain in no school; since liberal scholarships are offered by the bureau, many college and advanced students will come to the Carnegie Institute of Technology to fit themselves for welfare work, for teaching in the high school, and for supervising or directing the selling and non-selling force in large establishments; the research fellowships will be awarded to college graduates who have the proper preparation for undertaking an investigation of the selling and the non-selling activities. (The first study will be to find out the best method of selecting, training, and promoting those in inspector-wrapper work. It is being carried on by the staff with the assistance of the research group of students and in consultation with the executives in the stores.)

Under this co-operative plan boys and girls will all have equal opportunity to advance as far as their ability, energy, and character will permit.

## Educational News and Editorial Comment

### A NEW DEPARTURE

The policy of the *School Review* has been to avoid in every way the actual limitations, or even the appearance, of being a departmental organ. The officers of the School of Education of the University of Chicago have carried on the work of the editorial office, but have never allowed themselves to monopolize the space for institutional interests. For some years past it has seemed wise to the editors not to report in a systematic way the doings of the University of Chicago lest it should seem that this well-established policy had been abandoned—this, in spite of the fact that there has been a constantly increasing demand for news of the experiments which are being carried on in the laboratory schools and departments of the School of Education.

The *School Review* is published monthly from September to June by the University of Chicago. It is edited and managed by the Department of Education as one of a series of educational publications. The series, including also the *Elementary School Journal* and the *Supplementary Educational Monographs*, is under a joint editorial committee and covers the entire field of educational interests.

#### JOINT EDITORIAL COMMITTEE

CHARLES HUBBARD JUDD, *Chairman*  
SAMUEL CHESTER PARKER  
JOHN FRANKLIN BOBBITT  
HENRY CLINTON MORRISON

#### Articles and Editorials of *The School Review*

ROLLO LA VERNE LYMAN  
MORTON SNYDER

#### Reviews

HAROLD ORDWAY RUGG  
ROLLA MILTON TRYON

#### Articles and Editorials of *The Elementary School Journal*

FRANK NUGENT FREEMAN  
HARRY ORRIN GILLET

#### *Supplementary Educational Monographs*

WILLIAM SCOTT GRAY  
MARCUS WILSON JERNEGAN

#### ADVISORY BOARD OF THE SCHOOL REVIEW

WILLIAM McANDREW, New York City  
JEROME O. CROSS, Fresno, California  
I. M. ALLEN, Springfield, Illinois  
FRANKLIN W. JOHNSON, New York City  
H. L. MILLER, Madison, Wisconsin

H. V. CHURCH, Cicero, Illinois  
ALEXANDER INGALLS, Cambridge, Massachusetts  
E. A. MILLER, Oberlin, Ohio  
FRED C. AYER, Seattle, Washington  
L. V. KOOS, Minneapolis, Minnesota

With this issue an experiment is being inaugurated. Two pages are being set aside for news from the School of Education. At the same time steps have been taken to secure, if possible, from other institutions news of current experiments which are being tried in the field of secondary-school education. It is a well-known fact that many interesting innovations in high-school organization and instruction are devised each year and are not widely known because they are not thought of as sufficiently pretentious to justify discussion in a formal article. Yet, in the aggregate, these innovations make for steady progress in high-school education. It ought to be possible to interest principals and teachers in the exchange of news items on such matters. The items which will be published from month to month on the activities in one department will, it is hoped, serve to stimulate others to report in the same way in short statements the experiments in which they are engaged. The editors invite co-operation in this exchange of one-page statements. They will welcome, also, questions or suggestions which will lead to interchange on the part of secondary-school people of short definite comments on matters of current interest.

#### THE NATIONAL EDUCATION ASSOCIATION IN 1919

A sparsely attended meeting of the National Education Association was held in Milwaukee during the week of July 4. There was no enthusiasm for the Association or its doings. There was no action of importance to American education; no report of a working committee which promised real progress in school matters; no projection of productive plans for the future. It was voted to hold the meeting next year in a remote city. The present political management of the organization was confirmed in its power.

The Association is threatened with dissolution. Other organizations with more homogeneous interests are coming into prominence. The Department of Superintendence is

infinitely more influential as a gathering genuinely interested in educational reports and hitherto relatively free from the blighting influence of selfish politics. The Teachers' Federation, with its recent rapid expansion, has overtopped the National Education Association as the champion of higher salaries and federal subsidies to school systems. The summer sessions of normal schools and universities absorb the time and attention of teachers seeking better preparation for their work.

To these positive reasons for the withdrawal of patronage from the summer meetings of the Association must be added one large outstanding negative fact. The leaders of the National Education Association are either unable or unwilling to rescue the Association from quarrels and bickering which have nearly accomplished its ruin.

There can be little doubt that the winter meeting will hereafter be looked to as the important educational meeting of the country. It is a serious defect of the organization of the Department of Superintendence that it is in form and in the management of its funds an appendage of the central Association. It would be much better for education if the dues of those who are interested in the winter meeting could be used for productive educational activities without an appeal to the trustees of the Association. Work could then be undertaken on a broad professional scale and results could be secured. It is distinctly to be hoped that the Department will throw off its inhibiting affiliation with the moribund Association.

DR. CHADSEY, DEAN OF THE SCHOOL OF EDUCATION  
OF THE UNIVERSITY OF ILLINOIS

Some months ago the *School Review* announced with great satisfaction the appointment of Dr. Chadsey to the superintendency of schools of the city of Chicago. Since that time much has happened. Mayor Thompson was re-elected; a new board of education absolutely subservient to the City Hall was

appointed and ratified by the City Council. The new board, acting in accordance with the Mayor's pre-election promises, promptly repudiated the election of Mr. Chadsey and elected Mr. Mortenson. Mr. Mortenson was for a time superintendent under an earlier City Hall board. He was favored by the Principals' Association, a powerful political organization which has long dictated policies to superintendents of schools in Chicago. Mr. Mortenson was also favored by many, if not most, of the teachers who joined the principals and the Mayor in opposing the appointment of any outsider as an affront to the system.

The legality of Mr. Mortenson's appointment is before the courts with very large probability that Dr. Chadsey will be reinstated. In the meantime, universities saw the possibility of interesting Dr. Chadsey in productive scholarly contributions to education. The University of Chicago welcomed him to the summer quarter where he gave to a large body of advanced students courses on school administration. The University of Illinois persuaded him to undertake the organization of the new School of Education, for which generous provision has been made by the legislature and trustees.

One is divided in one's interests. The educational profession will profit greatly by Mr. Chadsey's decision to devote to the development of a department of education his broad scholarly training and the results of his wide experience. On the other hand, the organization of the larger school systems is one of the major problems of modern American education. It is unfortunate for Chicago and for the country at large that the organization of this great system is indefinitely postponed. It was the deliberate judgment of the leading educators of the United States and of a commission of disinterested citizens that Dr. Chadsey was the one man in the country who could bring into being in Chicago an organization of schools worthy of



this great metropolis. These judges passed no uncertain judgment on the corps of officers of the local system. The educational profession of the nation has in its published comments made very clear its judgment of those within the schools who contributed to a continuation of the chaos which has for years characterized the school situation in the second city of this continent.

#### ST. LOUIS AND THE SUPERINTENDENT

Once more the schools of St. Louis have outlived a political attack. This time the attack came in the form of an effort on the part of a discredited member of the board, who got his election by political trickery, to hold up the appointments recommended by the superintendent. Five leading principals and assistant superintendents were held up by the chairman of the Teachers' Committee of the board. He had not exercised his functions on the Committee, and he did not cover up the fact that his action was intended to discredit the superintendent.

Superintendent Withers did what he has done several times before in recent months—went to the mat with Mr. Murphy, and this time it appears that there is not enough left of Mr. Murphy to be concerned about in the future. There were no adequate grounds for the postponement of action on Superintendent Withers' nominations. The opposition apologized and promised to behave.

Superintendent Withers has done American schools a service. There is no possibility of blinking the fact that many school men are cowards. When some politician tries to bully them, they give way because they are afraid to maintain their positions. The politician ought to be made to understand, as he does in St. Louis, that the school man knows his business and his mind, and that facts cannot be neglected if they are in the hands of a superintendent with steady nerves and a clear eye.



It might not be a bad plan for school men to study the St. Louis situation. Here is a system that has devoted a great deal of attention to the training of teachers-in-service. Here is a system in which the principals are selected because they are trained in educational science and have had experience in other centers. Here is a school system with a charter drafted by some of the best and wisest citizens of the city. Here is a system which has been presided over for generations by strong superintendents who were not in politics, but not afraid of politicians.

#### TECHNICAL BOOKS

There are gradually filtering into the lists of books offered to high-school students titles which the older teachers of English used to neglect entirely. By way of encouraging this tendency, the following news item, supplied by the American Library Association, is offered as indicating what high-school pupils, as well as soldiers, like:

The American Library Association War Service is taking an active part in the program of reconstruction that has for its aim the fitting of discharged American soldiers and sailors into useful civilian occupations. To satisfy the demand of the home libraries for a list of the technical books that will meet the needs of the discharged soldier or sailor, its book department has just published an attractive 123-page list of technical books.

Arrangement is by broad subjects with an index by smaller subjects. "An attempt has been made to arrange the books under subject in order of difficulty where scope is similar, otherwise to progress from the general treatise to the limited and specialized." Full annotation and the starring of entries suitable for first purchase add greatly to the value of the book as a buying list. Larger libraries that already have excellent collections of technical literature will welcome the list for its reference value in connection with reconstruction work.

The demand made upon the libraries for this class of literature by returning troops is very great. The librarian in charge of the technical department of one library, who kept account of the matter for some time, reported that an average of 100 men daily testified that they had first learned of the technical books for which they were asking thru the War Service of the A. L. A.

## NEED OF TEACHERS IN WISCONSIN

The State Board of Education of Wisconsin has published a statement regarding the situation which the high schools are facing which is so typical of the conditions in all parts of the country that one section of the statement may be quoted. It is as follows:

## TRAINING HIGH-SCHOOL TEACHERS OF GENERAL SUBJECTS

## THE SITUATION

1. There are certain facts regarding the present situation with reference to the training of high-school teachers that are universally agreed upon, namely:
  - (a) That the supply of persons with the legal qualifications to teach in high schools is less than our needs.
  - (b) That the public education agencies of the State furnish not more than  $\frac{3}{4}$  of the supply.
  - (c) That many of the persons teaching in our high schools are inadequately trained for the work.
  - (d) That for many high-school teachers the teacher training they received was in lines other than those that they are now engaged in teaching.
  - (e) That the teacher personnel is a rapidly fluctuating one.
  - (f) That the teacher personnel is a migratory one.
  - (g) That about  $\frac{1}{8}$  of the high-school teachers are men.
2. There is one hopeful sign in the situation, namely, that the compensation of high-school teachers and principals is increasing substantially.
3. There is fairly substantial agreement that a high-school teacher ought to have four years' training in advance of high-school graduation, i.e., graduation from a college with special emphasis on education, or the equivalent wherever given. This is an ideal to be aimed at rather than a practical proposal to be immediately put into effect.
4. Adequate standards have not yet been insisted upon for teachers of the special branches because of the recent remarkable development of these branches. This field offers special problems to be taken up subsequently.
5. The laws for the certification of teachers for all grades of schools need a thoroughgoing radical revision.

## DISTRICTING STATES FOR HIGH SCHOOLS

Attention was called in an earlier issue of the *School Review* to the unsolved problem in all of our states which appears in

the fact that the territory of these states has never been restricted for high schools. There is no foot of soil in the United States which does not fall within an elementary-school district, and for most children there is provision for an elementary education. Example after example turns up, on the other hand, of lack of proper provision for education beyond the eighth grade. This time the evidence comes from Tioga County in New York.

The teachers of Tioga County made a survey and found that out of a total of 919 pupils only 204 live within two miles of a high school; 193 live between two and four miles from a high school; 173 between four and six miles; 249 between six and eight miles; and 100 more than eight miles. The result of these conditions is that a great many pupils drop out of school as soon as the compulsory school law permits.

It would be a very impressive lesson in all the states if similar surveys could be made. The facts in many districts would be less optimistic than those from southern New York.

One solution of the difficulty is the more general establishment of junior high schools. Such schools require less extensive districts than do senior high schools and they carry pupils to an age when it becomes more feasible for them to make, if necessary, long trips to secure the advantages of a high school. The junior high school is a desirable addition to consolidated rural schools and to the school systems of small towns long before the senior high school is possible.

#### JUNIOR HIGH SCHOOLS

The Bureau of Education has issued as Leaflet No. 5, 1919, a list of references on the junior high school. This is a comprehensive list including references down to 1919. It will do much to help those who are making a study of this unit of the American school system to get the material necessary for their readings.

The list is very impressive evidence of the widespread interest in this movement for an enlargement of the elementary school and a better articulation of the lower school with the high school. It shows that there is a clear recognition of the importance of the experiment and a genuine effort to develop through discussions the meaning of the new movement.

There are those who have not read the numerous articles and books on the junior high school. Some of them say that the new school has no clear definition. Some of them say that it is nothing but a renaming of the upper grades. The writer met a member of a prominent committee which is recommending radical changes in the high-school curriculum and learned that the committee had not considered the effects on its work of the junior high-school movement. All these classes of uninformed people can now get at the references for reading by writing to the Bureau. If they would avail themselves of the opportunity, they would discover that there is no more important fact in American school history than this modern reorganization of the seventh, eighth, and ninth grades.

**News Items from the School of Education of the  
University of Chicago**

**THE APPOINTMENT OF HENRY CLINTON MORRISON**

Henry Clinton Morrison has just been added to the Department of Education of the University of Chicago. His title is Professor of School Administration and Superintendent of the Laboratory Schools.

Professor Morrison has had a long and successful experience as a school man. After graduating from Dartmouth College in 1895, he filled the position of high-school principal at Milford, New Hampshire, and Superintendent of City Schools at Portsmouth, New Hampshire. From the latter position he went to the State Department of Education, where he served as superintendent from 1904 to 1917.

The improvements that were worked out in New Hampshire during Superintendent Morrison's administration are well known to students of education. The reports which issued from his office have been widely quoted in administrative literature. His studies of normal schools, his suggestions with regard to the reorganization of the course of study, his statistical reports on attendance, and his vigorous attacks on the problems of child labor are among the notable achievements which he accomplished during his administration. One of the early centers of the junior high-school movement was at Concord, where plans were worked out under his immediate suggestions. The adaptation by the secondary schools to the needs of their environment constituted one of the most significant changes in the New Hampshire system of education. The problem of developing high schools in such a way that they should be independent of the dictations of college requirements was also solved by the development of a system of state inspection and accrediting of secondary schools.

In 1917 Professor Morrison was invited to go to Connecticut where for two years he was Assistant Secretary of the State Board of Education. During this short period he had charge of the normal and secondary schools of the state. Professor Morrison organized a Bureau of Educational Research under a special subsidy of the General Education Board. A number of important educational investigations have been derived from the work of this bureau.

His publications include city school reports in Portsmouth, six state education reports for New Hampshire, a series of pedagogical and administrative bulletins issued in New Hampshire and Connecticut by the state departments, and a contribution to the *Thirteenth Yearbook of the National Society for the Study of Education*.

Professor Morrison holds, in addition to his A.B. from Dartmouth, an M.S. from New Hampshire College and an LL.D. from the University of Maine.

Professor Morrison will have supervision over the University High School and the University Elementary School. The addition of this new officer to the faculties of these two schools is designed to facilitate the type of scientific work which has been carried on in both these schools during the past few years. A number of improvements in the organization of the materials of instruction are well under way. Professor Morrison will have general charge of these investigations and will also co-operate with the individual members of the faculties in their routine work and in the development of the curricula. He will also give courses in the Department of Education in School Administration, co-operating with Professor Bobbitt and Professor Rugg in the development of that division of the courses of the Department which deals with school organization and the functions of superintendents, principals, and general supervisors.

## RECENTLY PUBLISHED MONOGRAPHS

Two numbers of the *Supplementary Educational Monographs* were published during the summer. The first is entitled "Educational Legislation and Administration in the State of New York from 1777 to 1850," by Elsie Garland Hobson. This monograph presents in eight chapters a vivid and faithful picture of the origin and early development of one of the most important school systems of the country. The following problems are discussed in detail: the various influences modifying legislation in New York; the origin of the dual system; the University of the State of New York and the common schools to 1820; education under the regents; special legislation for cities; state support of education; and education of special classes.

The second monograph is entitled "A Survey of Commercial Education in the Public High Schools of the United States," by Leverett S. Lyon. This monograph is an inventory and appraisal of the work now being done in commercial courses in high schools. Some of the important general topics discussed in the five chapters into which the report is divided are aims and policies of commercial education, organization and length of commercial courses, correlation with other subjects, courses for boys and courses for girls, types of teaching, etc. Business English, advertising, commercial organization, and other recent additions to the curriculum are given as complete treatment as the older and more technical subjects. The problems of business and the problems of citizenship are discussed in a manner which gives new inspiration to commercial studies.



## Educational Writings

### I. BOOK NOTES AND REVIEWS

#### SOME RECENT BOOKS OF INTEREST TO HIGH-SCHOOL HISTORY TEACHERS

During the late spring and early summer a number of books appeared in which high-school history teachers will find much to interest them. The most recent of these is Professor Breasted's *Survey of the Ancient World*.<sup>1</sup> At the present time there is quite a demand for a textbook in the field of ancient history which can be conveniently completed in a half-year. Professor Breasted's book meets this demand. The book is not the author's *Ancient Times* in another form. It offers in a much briefer form than this volume contains an admirable sketch of the ancient world. It should be further stated that the book does not contain exactly the same material as that included in the first half of Robinson and Breasted's *Outlines of European History, Part I*. While one would expect to find much of the same material in these books which the author included in his other two volumes concerning the same field, yet, after carefully comparing the three volumes, one must conclude that there is enough difference in the three books to justify one in speaking of *Survey of the Ancient World* as a new book.

The recent appearance of two volumes by Professor Webster<sup>2</sup> completes the series of high-school histories which had its beginning in the appearance of Webster's *Ancient History* in 1913. As the list stands now it includes *Ancient History*, from prehistoric times to the Age of Charlemagne; *Early European History*, from prehistoric times to the seventeenth century; *European History, Part I*, the ancient history section of *Early European History*; *European History, Part II*, from the fall of Rome to the seventeenth century; *European History, Part III*, from the Age of Louis XIV to the present; *Medieval and Modern History*, from the fall of Rome to the present. This last volume is nothing other than *European History, Part II* and *Part III* bound together. It should be said for the company and the author that they have shown considerable ingenuity in discovering so many forms to bind the same material. They should be commended, rather than criticised for

<sup>1</sup> J. H. BREASTED, *Survey of the Ancient World*. Boston and Chicago: Ginn and Co., 1919. Pp. xii+417.

<sup>2</sup> HUTTON WEBSTER, *Medieval and Modern History* and *European History, Part III, Modern Times*. Chicago: D. C. Heath & Co., 1919. Pp. xxvi+787 and pp. xxvii+412.

their ingenuity for, as the material now exists, a teacher can easily find a book to meet his needs.

Books on recent European history suitable for use in high school are at the present time in great demand. Professor Hazen's *Fifty Years of Europe, 1870-1919*<sup>1</sup> will be welcomed by those seeking supplementary reading matter in European history since 1870. While the treatment emphasizes the political history at the expense of the economic and social, it certainly presents the events leading up to the Great War in a readable and attractive style. The last one hundred pages are devoted to the World War. The writer knows of no better material in a form which high-school students will actually have time to read than these one hundred pages contain. They will be of great service in supplementing the necessarily brief treatment of this important topic which most recent textbooks in European history contain.

One result of the war has been to call attention to the historical connections and relations of America and Britain. Teachers are anxious to be informed on this subject. To aid them there are now three books, two of which appeared late in 1918<sup>2</sup> and one in 1919.<sup>3</sup> The first two are brief and popular treatments of the subject. They present excellent accounts for the one who does not care to go deeply into the subject. Individuals wishing to go into the subject deeper and at the same time know what one who has spent many years in studying it has to say will read Professor McLaughlin's book, which is largely made up of lectures delivered in England during the summer of 1918. America's entry into the war, British and American relations, the Monroe Doctrine, and the background of American Federation are the subjects treated in the volume.

The flood of books on the history of the war has already made its appearance. A treatment of the subject which has recently come to this department is *The World War for Democracy*<sup>4</sup> which on the whole is a rather imposing and attractive volume. The type is large and clear, the style easy, and the organization of each chapter easily grasped. There are also a great number of excellent illustrations. While the treatment is altogether too bulky to expect a class to read it all during the time devoted to the topic, the book will be of value as a reference work to be consulted occasionally.

<sup>1</sup> C. D. HAZEN, *Fifty Years of Europe, 1870-1919*. New York: Henry Holt & Co., 1919. Pp. 428.

<sup>2</sup> H. H. POWERS, *America and Britain*. New York and Chicago: Macmillan, 1918. Pp. iv+76; *British-American Discords and Concords, a record of three centuries*. New York: G. P. Putnam's Sons, 1918. Pp. viii+85.

<sup>3</sup> A. C. McLAUGHLIN, *America and Britain*. New York: E. P. Dutton & Co., 1919. Pp. ix+221.

<sup>4</sup> W. W. SAGE, E. E. RUSH, and special contributors, *The World War for Democracy*. Kansas City: McIndoo Publishing Co., 1919. Pp. xi+283.

The National Security League has issued a new edition of the *Handbook of the War for Readers, Speakers, and Teachers*, which was first printed in August, 1917.<sup>1</sup> The majority of the material in this edition is entirely new. The general plan adopted in this issue is to follow each chapter with a large number of illustrative extracts. History teachers will find these extracts from original sources of great value. Inasmuch as this material is organized around certain definite topics, it can be made to illuminate the general statements in the main discussion. In all, the pamphlet contains eleven chapters devoted to such topics as the following: How the Government of Germany, with Austria, Prepared for the War; Responsibility for the War; The Events which Forced the United States into the War; Our Government's Conduct of the War; New Activities of the Citizen; Historical Sketch of Military Operations; International Problems of Peace and Sketches of Warring Peoples; Internal Problems of Peace for the Citizen; Bolshevism; and War Statistics. The reader will observe that these topics are just the ones in which people of today are interested. For this reason there is probably no better material of this type on the market to put into the hands of high-school students. It is not only readable, but it is teachable as well.

Verse in usable form for illustrative purpose in history teaching is altogether too scarce. Besides giving inspiration, stirring the imagination, and creating enthusiasm, this sort of material can be used to make many abstract statements concrete. Teachers interested in material to assist them along these lines will welcome a recent publication under the title, *Verse for Patriots*.<sup>2</sup> From the verse produced during the war describing the thrilling deeds of individual heroes and embodying the spirit of the nations battling for right and freedom have been drawn some of the finest—"The Road to France," Daniel M. Henderson; "Salutation," Marion Couthouy Smith; "In Flanders' Fields," John McCrae; "Verdun," Berton Braley; "The Old Kings," Margaret Widdemer; "The Soldier," Rupert Brooks; "I Have a Rendezvous with Death," Alan Seeger; and many more. To these have been added the deathless songs of an older day, such as "The Greeks at Thermopylae," by Lord Byron; national songs of all the Allies; invocations to the flag and to freedom; and poems born of the spirit which holds all men brothers—a true internationalism of common ideals and faith. The world has broken with false gods, and though the battle still rages, in the hearts of the young thrills a presage of victory.

<sup>1</sup> A. L. FROTHINGHAM, *Handbook of War Facts and Peace Problems*. New York: National Security League, 1919. Pp. 253.

<sup>2</sup> JEAN BROADHURST and CLARA L. RHODES, *Verse for Patriots*. Philadelphia: J. B. Lippincott Co., 1919. Pp. xi+367.

## SOME RECENT BOOKS IN THE FIELD OF GENERAL EDUCATION

*The Reconstructed School*<sup>1</sup> is the title of the tenth volume in the "School Efficiency Monographs," published by the World Book Company. It is a book which aims to point the way to the securing of larger and better results in education. It recognizes the fact that in school processes there are elements recognized as constants and elements recognized as variables. It is with the latter that this book deals as is indicated by the subject-matter of the different chapters: A Preliminary Survey of the Task Before the School; The Past as Related to the Present; The Future as Related to the Present; Integrity; Sense of Responsibility; Appreciation; Aspiration; Initiative; Imagination; Reverence; Loyalty; Democracy; Serenity; Life. Aims and purposes are constantly considered, for these very largely determine the quality of any work. Teachers will find the book stimulating and helpful, and all who are interested in schools can read it with profit.

*What the War Teaches about Education*<sup>2</sup> is a collection of papers and addresses rather than a constructive treatment of a unitary theme. The general theme of the papers and addresses is this: *Unless students work purposively, they do not work at all.* The author feels that if the war taught us anything, it taught us that general education, whether of the formal-discipline type or of the merely aimless-keeping-company-with-students sort, cannot be relied upon. Chapter xiv, "What the War Teaches Us about Education," gives the clue to the general title of the volume. Other chapters deal with contemporary ideals in education, the child in modern society, why we get on so slowly, the doctrine of general discipline, formal discipline, what history is and why we want it, religious education and the war, and education by immediate objectives. The appendix contains The English Education Act of 1918, The American Education Bill, and The German Education Program.

*Problems of the Secondary Teacher* is an authorized translation of the second edition of a book written by Professor William Jerusalem, of the University of Vienna.<sup>3</sup> The translator states in the preface that he has omitted all portions of the book that would have little or no interest outside of Austria. The material as translated consists of five chapters as follows: "The Secondary Teacher," "The Character and the Problem of the Sec-

<sup>1</sup> F. B. PEARSON, *The Reconstructed School*. Yonkers-on-the-Hudson, New York: World Book Co., 1919. Pp. vii+120. \$0.90.

<sup>2</sup> E. C. MOORE, *What the War Teaches about Education*. New York and Chicago: Macmillan, 1919. Pp. x+334.

<sup>3</sup> R. G. BADGER (translator), *Problems of the Secondary Teacher*. Boston: The Gorham Press, 1918. Pp. 251.

dary School," "The Scientific Problem of the Secondary Teacher," "Didactics," and "Ethical and Social Problems." In the following brief quotation from the translator's preface one has an excellent characterization of the entire discussion: "Jerusalem has cultivated the fields of philosophy, psychology, and sociology, and it is these that are peculiarly essential to an undertaking of the problems of pedagogy. He has learned much from Spencer in sociology, from Royce in philosophy, and from James in psychology. In the treatment of his problems he has dealt with an earnest frankness with everything, with the result that we have a book which must appeal to everyone who really cares for the advancement of the race and has anything like confidence that the school can be made an effective agent in effecting such advance."

*Letters to Teachers*<sup>1</sup> is also a collection of papers reprinted from articles previously published in newspapers, magazines, and educational journals. The letters deal with such subjects as life's adventure, the school and the commonwealth, the school and the community, the schoolyard, the curriculum, the humanities, history, the Bible in the schools, nature and science, crafts and vocations, the life of youth, poetry and pageantry, the age of romance, the school system, the teacher's profession, and the teacher's life. Besides these sixteen letters there are additional chapters devoted to foreign-language study, community pageantry, education in taste, and education and democracy. The general problem with which the series of papers deals is reconstruction in the education of the American citizen. Internal conditions rather than the external affairs of our nation are discussed in a frankly journalistic manner. There is sufficient unity in the book as a whole to make the reader conscious of the main issue which the author feels is sufficiently important to demand journalism, yes, even to justify propaganda, an admitted characteristic of the papers as a whole.

Books on education are often criticised adversely because of their theoretical and impractical nature. *Modern Elementary-School Practice*<sup>2</sup> hopes to escape criticisms of this character. The author informs the reader in the preface that he advocates nothing in the book that has not had successful application and thorough trial, and that every illustration, with which the text is copiously supplied, is taken from classroom practice. The book contains chapters on the application of educational theory, the problem method, the project, motives, the doctrine of interest in practice, a school

<sup>1</sup> H. B. ALEXANDER, *Letters to Teachers*. Chicago: Open Court Publishing Co., 1919. Pp. 253. ✓

<sup>2</sup> G. E. FREELAND, *Modern Elementary-School Practice*. New York and Chicago: Macmillan, 1919. Pp. xiv + 408. ✓

subject taught through interest, utilizing the common interest, and a number of similar topics. As hinted above the text is full of illustrative material, some of value and some mediocre. Examples of the latter sort are found in the chapters "The Problem Method" and "The Project," where some illustrations are given of problems and projects in history. If the problem method in history means nothing more than what Professor Freeland conceives it to be, it has little to contribute to better history teaching. The book should be widely read by teachers of the elementary-school branches.

On a subject as new as the junior high school one would expect to appear some rather commonplace literature. A careful reading of a recent book<sup>1</sup> on this subject leads the writer to classify it among the ordinary volumes that are frequently added to the literature of education. The author frankly admits in the preface that the book is not a complete treatise on the junior high school, and he is quite right. One is somewhat lost to know just what to call it. To treat adequately and in a worth-while manner each of the subjects of his ten chapters would require much more space than the writer of this volume has seen fit to use. Two short chapters are devoted to the course of study, neither of which contributes anything of much value. The same can be said of the chapters on teaching and the administration of the junior high school. In his chapter "The Problem and the Solution" the author uses misleading statistics to make his case. For example, there were other factors than the junior high school prominent in Grand Rapids which resulted in the increased enrollment in the ninth grade during 1914 and 1915. The author's enthusiasm for the efficacy of the junior high school in holding pupils in school led him to ignore all factors save this one. This one example characterizes the book as a whole. The reader all the time feels that the author's statements and opinions are subject to many limitations.

#### SOME RECENT BOOKS OF INTEREST TO HIGH-SCHOOL MATHEMATICS TEACHERS<sup>2</sup>

*Elements of Plane Trigonometry with Complete Tables*<sup>3</sup> is the title of an excellent little textbook just published. This is practically a revision of a larger book on plane and spherical trigonometry written by the same authors.

<sup>1</sup> G. V. BENNETT, *The Junior High School*. Baltimore: Warwick & York, Inc., 1919. Pp. xi+220. \$1.00.

<sup>2</sup> This material was contributed by Ernst R. Breslich, University High School, University of Chicago.

<sup>3</sup> ALFRED MONROE KENYON and LOUIS INGOLD, *Elements of Plane Trigonometry with Complete Tables*. New York: Macmillan, 1919. Pp. xxvii+241. \$1.20.

It is aimed to reduce the material to the minimum essentials, giving at first the practical part with the emphasis on the solution of triangles and leaving the theoretical part to the end. There are twelve brief chapters. The first forty-eight pages are devoted to the discussion of acute angles and right triangles, and to the solution of right triangles, using both natural and logarithmic functions. This is followed by a discussion of obtuse angles and oblique triangles. The last part is a development of formulas for the general angle, and of the graphical representation of the trigonometric functions.

The treatment of the subject is excellent. The course is evidently intended for pupils who wish to get a working knowledge of trigonometry in the quickest possible time and who may wish to omit the study of the theory. However, the separation of related topics, such as the graphical representation and the changes of the functions, will cause an educational loss to the pupil who is preparing for more advanced courses in mathematics.

The tables at the end of the book contain logarithms to five places, and also to four places, important constants, reduction of degrees to radians, powers and roots, and natural logarithms.

Identically the same course as given in the *Elements of Plane Trigonometry with Complete Tables* and written by the same authors is published with brief tables.<sup>1</sup> The complete tables are replaced by twelve pages of brief tables to four decimals containing common logarithms, antilogarithms, values and logarithms of the trigonometric functions, powers and roots, important constants, and reductions of radians to degrees. The book is intended for pupils who prefer to have the theory of trigonometry separated from the tables.

The first of a two-volume series of high-school algebra by Ford and Ammerman<sup>2</sup> has just come from the press. It contains a year's work including a brief chapter on radicals and one on quadratic equations. By emphasizing applied problems it is aimed to make algebra practical, and by frequent use of diagrams it is intended to make the subject less abstract.

The authors avoid graphical methods at an early stage, but give a chapter on graphs near the end of the course. They believe that the use of graphical methods will retard the pupil's mastery of algebraic processes.

---

<sup>1</sup> ALFRED MONROE KENYON and LOUIS INGOLD, *Elements of Plane Trigonometry with Brief Tables*. New York: Macmillan, 1919. Pp. xxvii+129. \$1.00.

<sup>2</sup> WALTER BURTON FORD and CHARLES AMMERMAN, *A First Course in Algebra*. New York: Macmillan, 1919. Pp. xiii+334. \$1.20.



The book contains an abundance of carefully selected and graded exercises with numerous practical applications, but the main emphasis seems to be placed on developing a strictly logical treatment of algebra. In this, the authors have been very successful. For pupils who wish to take a brief course in algebra, topics which may be omitted are marked with a star.

A real need of a good textbook in arithmetic for pupils taking a commercial course is filled by *Walsh's Business Arithmetic*.<sup>1</sup> This book is to be used in the first year of the high school. It is not expected that all of the work contained in the book can be done in one year. Teachers, therefore, must select the material best adapted to the needs of their pupils. Emphasis is placed on methods used in actual business.

The book is divided into seven sections. The first three deal with the processes as they are needed to perform the tasks confronting the boy or girl entering into the business world. Sections four to six take up the topical treatment of the arithmetic needed to solve a variety of such actual business problems as arise in production, consumption, transportation, selling, and financing. The last section of the book is devoted to mensuration problems arising in business, and involving areas and volumes of the simple geometric solids. On the whole the organization and selection of the material is exceedingly well carried out. The book should prove to be very successful if used in commercial courses.

The authors of a *New High-School Arithmetic*<sup>2</sup> have grasped the important fact that arithmetic is more than a strictly utilitarian course, and that it is rich in both cultural and general training. The text presents a course claimed to be adapted to the needs of pupils taking either General, Normal, Industrial, or Commercial Courses. We feel that they have succeeded.

There is a wealth of problem material drawn from current life. The book will be easy to teach because the thought processes involved in the solution of the problems are developed simply and clearly in an inductive manner. Opportunity is given for selection of topics, and the text is readily applicable to the needs of different communities.

The chapter on geometry is somewhat of an advance over the old-time chapters on mensuration because of its rich content of practical problems. Altogether it is an excellent, practical, well-organized book.

---

<sup>1</sup> JOHN H. WALSH, *Walsh's Business Arithmetic*. New York: Gregg Publishing Co., 1919. Pp. viii+496.

<sup>2</sup> WEBSTER WELLS and WALTER W. HART, *New High-School Arithmetic*. New York: D. C. Heath & Co., 1919. Pp. viii+358.

*The Winston Simplified Dictionary*.<sup>1</sup>—There are listed in this handy volume over forty thousand words, each set out in bold type to catch the untrained eye, and each defined in terms easy to understand. Moreover, each definition is complete in itself; it is not necessary to look for a word in more than one place. The book will not only be an aid to teachers in the elementary and high schools of the country, but it will be of particular value in vocational and continuation schools, and in Americanization classes, where older men and women are endeavoring to get a command of the language to fit them for intelligent citizenship.

The illustrations are up to date, and include six full-page color plates of birds, fish, insects, and trees, as well as abundant engravings in the text. The binding is of cloth, strong and durable, and chemically treated to resist the attacks of vermin when stored during the summer vacation.

*A new economic botany for high-school students*.—A new volume in Lippincott's "Farm Life Text Series" has just appeared. The title, *Applied Economic Botany*,<sup>2</sup> implies first, that it is intended as a guide to experimental work in the study of plants, such as should be carried on in any high school, and secondly, that it is intended as a preliminary work to the agricultural studies which are now recognized in many high schools.

The author has endeavored to make the work so flexible that it may be used in schools regardless of the amount of time devoted to the subject, the available laboratory space, and equipment. He has also been mindful of the fact that the course in botany in the secondary school should meet the needs of very different classes of pupils—those who study it as one of the requirements of the curriculum and to whom it must be primarily a cultural subject, those who study it as a preparation to agriculture and horticulture, and those who may use it to fulfill one of the college-entrance requirements.

The plan includes three things: first, a brief statement of recognized facts and principles concerning plants and plant growth usually given in textbooks for secondary schools; secondly, a list of simple exercises and suggestions for observations which the pupil can conduct without great difficulty and which will demonstrate many of the statements given in the book; and thirdly, a list of questions intended to be suggestive to the pupil and to encourage further studies. The author has drawn his material and method, both admirably

<sup>1</sup> W. D. LEWIS and E. A. SINGER, *The Winston Simplified Dictionary*. Philadelphia: John C. Winston Co., 1919. Pp. 820. Six full-colored plates and 800 illustrations. \$0.96, postpaid.

<sup>2</sup> M. T. COOK, *Applied Economic Botany*. Philadelphia: J. B. Lippincott Co., 1919. Pp. xviii+261. Illustrations, 142. \$1.60.

adapted to the ends sought, from a very wide experience in teaching botany in both secondary school and college. In the hands of a competent teacher, it will serve to inspire the pupil with interest and enthusiasm, and train him in habits of self-reliance, close observation, and accuracy.

*An epoch-making book in the field of elementary natural science.*<sup>1</sup>—"In glancing through the pages of Mr. Downing's *Source Book of Biological Nature Study* one fact strikes us with overwhelming force—namely, how immense an array of valuable and instructive matter can be presented to the student without a trace of dullness or pedantry. Here we have before us the life and habits of bugs, insects, fish, crustaceans, reptiles, birds, wild and domestic animals, in an ascending scale, presented to us with a vividness which enchains our interest from beginning to end. We become familiar with the wayside flowers and trees, past which we have been traveling with unseeing eyes and unheeding feet; we learn something of reforestation activities, of gardening and horticulture, of the morphology of plants and the care and raising of domestic animals. And all in so attractive a manner that we seem less to be learning than watching the great drama of life unfolding before our fascinated gaze. Nor is all this offered us at the expense of a more accurate and systematic knowledge of the subject. We slide by easy degrees into a deeper view of phenomena and relationships, until at last we find ourselves equipped for a wider acquaintance with the various disciplines involved than even this notable volume can offer us. And toward this consummation we are helped by an extensive bibliography offered at the end of each absorbing chapter. In the words of the author, the material presented is 'thrown into problem form, is selected for its social and practical values, and yet is commonplace, so that the everyday things may stand revealed as the wonders they really are.'

"This restatement of the subject-matter of science, exhaustively illustrated, marks a distinct step forward in methods of instruction. The enthusiasm with which it has been received in educational circles should find its parallel in popular appreciation, for it offers, in a degree unequaled by any previous work of its kind, information both useful and delightful to the student, the teacher, the business man, the farmer and all whose interest in the practical aspects of the world of life have not suffered incurable atrophy and decay. The volume is literally a moving picture of natural history and a wide open door to vaster and more comprehensive fields of research."<sup>2</sup>

F. A. CHAPPELL.

<sup>1</sup>E. R. DOWNING, *A Source Book of Biological Nature Study*. Chicago: The University of Chicago Press, 1919. Pp. xxi+503. \$3.00.

<sup>2</sup>A reprint, with permission, from the *Chicago Daily News* book page.

## II. CURRENT PUBLICATIONS RECEIVED DURING THE PAST MONTH

### A. GENERAL EDUCATIONAL METHOD, HISTORY, THEORY, AND PRACTICE

- ALEXANDER, HARTLEY BURR. *Letters to Teachers*. Chicago: Open Court Publishing Co., 1919. Pp. 253.
- BENNETT, G. VERNON. *The Junior High School*. Baltimore: Warwick & York, Inc., 1919. Pp. xi+224.
- BUCKNER, CHESTER A. *Educational Diagnosis of Individual Pupils*. New York: Teachers College, Columbia University, 1919. Pp. ix+93.
- CARY, C. P. *The State and the Public Schools*. Madison, Wis.: State Department of Public Instruction, 1919.
- Course of Study—Baltimore County Schools*. Baltimore: Warwick & York, Inc., 1919. Pp. viii+698. \$2.75.
- CUMMINS, ROBERT ALEXANDER. *Improvement and the Distribution of Practice*. New York: Teachers College, Columbia University, 1919. Pp. vi+72.
- DEWEY, EVELYN. *New Schools for Old*. New York: E. P. Dutton & Co., 1919. Pp. xi+337.
- FREELAND, GEORGE E. *Modern Elementary School Practice*. New York: Macmillan, 1919. Pp. xiv+408.
- FRETWELL, ELBERT KIRTLEY. *A Study in Educational Prognosis*. New York: Teachers College, Columbia University, 1919. Pp. 55.
- JERUSALEM, WILLIAM. *Problems of the Secondary Teacher*. Boston: Richard G. Badger, 1918. Pp. 253.
- KOLBE, PARKE REXFORD. *The Colleges in War Time and After*. New York: D. Appleton & Co., 1919. Pp. xx+320. \$2.00.
- McFEE, INEZ, N. *The Teacher, the School, and the Community*. New York: American Book Co., 1918. Pp. 256.
- MINER, JAMES BURT. *Deficiency and Delinquency*. Baltimore: Warwick & York, Inc., 1918. Pp. xiv+355.
- MOORE, ERNEST CARROLL. *What the War Teaches about Education*. New York: Macmillan, 1919. Pp. x+334.
- National Education Association of the United States*. Addresses and Proceedings of the Fifty-sixth Annual Meeting. Pittsburgh, 1918.
- Public Education in Delaware*. General Education Board. New York: 1919. Pp. x+202.

- RICHARDSON, ROY FRANKLIN. *The Psychology and Pedagogy of Anger*. Baltimore: Warwick & York, Inc., 1918. Pp. 100.
- SANDIFORD, PETER. *Comparative Education*. Studies of the Educational Systems of Six Modern Nations. New York: E. P. Dutton & Co., 1918. Pp. x+500.
- STIMSON, RUFUS W. *Vocational Agricultural Education*. New York: Macmillan, 1919. Pp. xxxv+468. \$2.50.
- The Mother's Book*. New York: University Society, 1919. Pp. xxv+524.
- The Rockefeller Foundation—Review for 1918, *Public Health in Many Lands, Centers of Medical Education, War Relief and Welfare of American Troops*. New York, 1919.
- > *The W. E. A. Year Book*. London: The Workers' Educational Association, 1918. Pp. 507.
- THWING, CHARLES F. *The College Gateway*. Boston: The Pilgrim Press, 1918. Pp. 277. \$1.50.
- WEEKS, RUTH MARY. *Socializing the Three R's*. New York: Macmillan, 1919. Pp. vii+182. \$1.12.

#### B. BOOKS PRIMARILY FOR ELEMENTARY-GRADE TEACHERS AND PUPILS

- BAILEY, CAROLYN SHERWIN. *Stories of Great Adventures*. Springfield, Mass.: Milton Bradley Co., 1919. Pp. 222.
- BARNES, WALTER. *Types of Children's Literature*. Yonkers-on-the-Hudson, New York: World Book Co., 1919. Pp. xiii+462. \$1.50.
- CHAFFEE, ALLEN. *The Adventures of Twinkly Eyes the Little Black Bear*. Springfield, Mass.: Milton Bradley Co., 1919. Pp. 183.
- COLBERT, EMMA, and BAYLOR, ADELAIDE S. *Young America's First Book*. New York: Century Co., 1919. Pp. 166. \$0.60.
- CORNEY, EVIE, and DORLAND, GEO. W. *Great Deeds of Great Men*. Boston: D. C. Heath and Co., 1919. Pp. vi+236.
- McVENN, GERTRUDE E. *Good Manners and Right Conduct*. Boston: D. C. Heath & Co., 1919. Book I, pp. xii+250. Book II, pp. xi+253.
- MOORE, ANNIE E. *Pennies and Plans*. New York: Macmillan, 1919. Pp. iv+124. \$1.12.
- PERKINS, LUCY FITCH. *The French Twins*. Boston: Houghton Mifflin Co., 1918. Pp. viii+201. \$0.60.
- SPAULDING, FRANK E., and BRYCE, CATHERINE T. *Learning to Read*. New York: Newson & Co., 1918. Pp. 243.

- SPAULDING, FRANK E., and BRYCE, CATHERINE T. *The Aldine Readers*. New York: Newson & Co., 1918. Four volumes.
- WADE, JOSEPH H., and SYLVESTER, EMMA. *Graded Readers, Second Reader*. Boston: Ginn & Co., 1919. Pp. 190. \$0.44.

C. BOOKS PRIMARILY FOR HIGH-SCHOOL  
TEACHERS AND PUPILS

- BRANSBY, CARLOS, and WORMAN, JAS. H. *Second Spanish Book*. New York: American Book Co., 1918. Pp. xii+129.
- BREASTED, JAMES H. *Survey of the Ancient World*. Boston: Ginn & Co., 1919. Pp. xi+417.
- BRIGGS, THOMAS H. *A Second Book of Composition*. Boston: Ginn & Co., 1919. Pp. xi+516.
- CODY, SHERWIN. *100% Self-Correcting Course in English Language*. Rochester, New York: The Sherwin Cody School of English, 1918. Twenty-five lesson pamphlets.
- COOK, MELVILLE T. *Applied Economic Botany*. Philadelphia: J. B. Lippincott Co., 1919. Pp. xviii+261.
- CURTIS, GEO. WM. *Prue and I*. Edited by Brecht. New York: Macmillan, 1919. Pp. 224. \$0.32.
- DAVIS, ROY. *Practical Exercises in English*. Boston: Ginn & Co. Pp. 104.
- DUBRULE, NÔELIA. *LeFrancois Pour Tous*. Boston: Ginn & Co., 1919. Pp. xxii+259.
- FIELD, WALTER TAYLOR. *Readings from English and American Literature*. Boston: Ginn & Co., 1919. Pp. x+612.
- GOFF, EMMET S., and MAYNE, D. D. *First Principles of Agriculture*. New York: American Book Co., 1918. Pp. 272.
- HOFFMAN, HORACE A. *Everyday Greek*. Chicago: The University of Chicago Press, 1919. Pp. ix+107. \$1.25.
- LABICHE ET MARTIN: *La Poudre aux Yeux*. Edited by C. P. Lebon. New York: Macmillan, 1919. Pp. viii+122. \$0.48.
- MATTHEWS, BRANDER. *An Introduction to the Study of American Literature*. New York: American Book Co., 1918. Pp. 268.
- MERIMEE, PROSPER. *Colomba*. Edited by Victor E. Francois. New York: Macmillan, 1919. Pp. x+306.
- NITCHIE, ELIZABETH. *Vergil and the English Poets*. New York: Columbia University Press, 1919. Pp. viii+251. \$1.50.
- NORTON, HELEN RICH. *A Textbook on Retail Selling*. Boston: Ginn & Co., 1919. Pp. xi+283. \$1.20.

- PAYNE, LEONIDAS W., JR. *History of American Literature*. Chicago: Rand McNally & Co., 1919. Pp. x+376.
- PAYNE, LEONIDAS W., JR. *Selections from American Literature*. Chicago: Rand McNally & Co., 1919. Pp. xiv+636.
- RHODES, CLARA L., and BROADHURST, JEAN. *Verses for Patriots*. Philadelphia: J. B. Lippincott Co., 1919. Pp. xi+367.
- RICHARDS, E. B. *Representative American Poetry*. New York: Chas. E. Merrill Co., 1919. Pp. 158.
- SCOTT, SIR WALTER. *Guy Mannering*. Edited by Eva W. Case. New York: Macmillan, 1919. Pp. xxxvii+499.
- STONE, JOHN C. *Junior High-School Mathematics, Book II*. Chicago: Benj. H. Sanborn & Co., 1919. Pp. vii+215.
- TAYLOR, E. H., and ALLEN, FISKE: *Junior High School Mathematics, Book II*. New York: Henry Holt & Co., 1919. Pp. ix+251.
- TURNER, JOHN ROSCOE. *Introduction to Economics*. New York: Chas. Scribner's Sons, 1919. Pp. xvi+641. \$2.50.
- URIBE-TRONCOSO, MANUEL. *Por Tierras Mejicanas*. Yonkers-on-the-Hudson, New York: World Book Co., 1919. Pp. xviii+180. \$0.88.
- WEBSTER, HUTTON. *European History, Part II*. Boston: D. C. Heath & Co., 1919.
- WEBSTER, HUTTON. *European History, Part III*. Boston: D. C. Heath & Co., 1919.
- WILLIAMS, JESSE FEIRING. *Healthful Living*. New York: Macmillan, 1919. Pp. xii+431.

D. PUBLICATIONS OF THE UNITED STATES BUREAU  
OF EDUCATION AND SIMILAR MATERIAL  
IN PAMPHLET FORM

Recent issues of the Bureau of Education:

- Bulletin No. 6, 1919—*A Half-Time Mill School*.
- Bulletin No. 16, 1919—*The Kindergarten Curriculum*.
- Bulletin No. 27, 1919—*Recent Progress in Negro Education*.
- Bulletin No. 30, 1919—*The American Spirit in Education*.
- Circular—*Bibliography of School Lunches*.

Recent issues of the General Education Board: *Private Endowment and Public Education*. New York, 1919.

Recent issues of the Federal Board for Vocational Education:  
*Federal Civil Service as a Career*.



*Evening and Part-Time Schools in the Textile Industry of the Southern States.*

*Conditions of Women's Labor in Louisiana.* New Orleans and Louisiana Industrial Survey. New Orleans, 1919. Pp. 138.

*Junk Dealing and Juvenile Delinquency.* An Investigation made for the Juvenile Protective Association of Chicago. Pp. 60. \$0.25. ✓

*The Libraries of the American State and National Institutions for Defectives, Dependents, and Delinquents.* Bulletin of the University of Minnesota, September, 1918. Pp. 56. \$0.50.

*Woman in the War.* A Bibliography. Washington: Government Printing Office, 1918.

#### E. MISCELLANEOUS PUBLICATIONS

BEST, HARRY. *The Blind.* New York: Macmillan, 1919. Pp. xxviii+763. \$4.00.

FINLEY, JOHN H. *American Democracy—Washington to Wilson.* New York: Macmillan, 1919. Pp. xiv+339. \$0.32.

GUTHRIE, WM. N. *The Religion of Old Glory.* New York: Geo. H. Doran Co., 1919. Pp. vi+414. \$2.50.

HAZEN, CHAS. D. *Fifty Years of Europe.* New York: Henry Holt & Co., 1919. Pp. 428.

LAVELL, CECIL FAIRFIELD. *Reconstruction and National Life.* New York: Macmillan, 1919. Pp. x+193.

LEFFERTS, WALTER. *American Leaders.* Philadelphia: J. B. Lippincott Co., 1919. Pp. iv+329.

McLAUGHLIN, ANDREW C. *America and Britain.* New York: E. P. Dutton & Co., 1919. Pp. 221. \$2.00.

WAYLAND, JOHN W. *Christ as a Teacher.* Boston: The Stratford Co., 1919. Pp. 70. \$0.75.

SWIFT, FLETCHER HARPER. *Education in Ancient Israel to 70 A.D.* Chicago: Open Court Publishing Co., 1919. Pp. xii+134.

*Young Folks' Treasury.* Edited by H. W. Mabie, E. E. Hale, and W. B. Forbush. A young people's encyclopedia in twelve volumes. New York: University Society.

## SUPPLEMENTARY EDUCATIONAL MONOGRAPHS

### VOLUME I. An experimental and statistical volume.

- No. 1. Studies of Elementary-School Reading through Standardized Tests. By WILLIAM SCOTT GRAY, Ph.D. (Out of print.)
- No. 2. An Experimental Study in the Psychology of Reading. By WILLIAM ANTON SCHMIDT, Ph.D. Pp. iv+126. Price \$0.75. Postage extra.
- No. 3. The Administration of Secondary-School Units. By LEONARD V. KOOS, Ph.D. Pp. x+194. Price \$1.00. Postage extra.
- No. 4. Arithmetic Tests and Studies in the Psychology of Arithmetic. By GEORGE S. COUNTS, Ph.D. Pp. iv+128. Price \$0.75. Postage extra.
- No. 5. Types of Reading Ability as Exhibited through Tests and Laboratory Experiments. By CLARENCE TRUMAN GRAY, Ph.D. Pp. xiv+196. Price \$1.25. Postage extra.
- No. 6. Survey of the Kindergartens of Richmond, Indiana. By ALICE TEMPLE, Ed.B. (Out of print.)

### VOLUME II. An experimental and statistical volume. (Complete volume, \$4.50 postpaid.)

- No. 1. Scientific Method in the Reconstruction of Ninth-Grade Mathematics. By HAROLD ORDWAY RUOG, Ph.D., and JOHN ROSCOE CLARK, A.B. Pp. vi+190. Price \$1.00. Postage extra.
- No. 2. An Experimental Study in Left-Handedness, with Practical Suggestions for School-room Tests. By ARTHUR L. BEELEY, A.M. Pp. viii+74. Price \$0.50. Postage extra.
- No. 3. The Handwriting Movement. A Study of the Motor Factors of Excellence in Penmanship. By FRANK N. FREEMAN, Ph.D. With the assistance of H. W. Nutt, Mary L. Dougherty, C. F. Dunn, and P. V. West. Pp. xvi+170. Price \$1.25. Postage extra.
- No. 4. Reading: Its Nature and Development. By CHARLES HUBBARD JUDD, Ph.D. With the co-operation of William Scott Gray, Katherine McLaughlin, Clarence Truman Gray, Clara Schmitt, and Adam Raymond Gilliland. Pp. xiv+192. Price \$1.00. Postage extra.
- No. 5. A Survey of Commercial Education in the Public High Schools of the United States. By LEVERETT S. LYON, A.M., Instructor in Commercial Organization, University of Chicago. Price \$0.65, postpaid.

This monograph is an inventory and appraisal of the work now being done in commercial courses in high schools. Some of the important topics discussed are aims and policies of commercial education, organization and length of commercial courses, correlation with other subjects, courses for boys and courses for girls, types of teaching, and recent additions to the curriculum.

*A later number to be announced.*

### VOLUME III. An historical volume. (Complete volume, \$4.50 postpaid.)

- No. 1. Educational Legislation and Administration in the State of New York from 1777 to 1850. By ELSIE GARLAND HOBSON, Ph.D. Pp. x+268. Price \$1.60, postpaid.
- No. 2. The History of Educational Legislation in Ohio from 1803 to 1850. By EDWARD ALANSON MILLER, Ph.D., Professor of Education, Oberlin College. (In press.) The educational legislation of Ohio is of peculiar significance for it was the first state of the Northwest Territory to try to solve the problem of popular education.
- No. 3. Development of High-School Curricula in the North Central States. By JOHN ELBERT SROUT, Ph.D. Professor of Education, Cornell College, Iowa. (In press.)

This study will be an important aid in formulating new and modifying old courses and subject-matter of the high-school curriculum in the coming period of reconstruction. It covers the development of courses and subject-matter in high schools in the North Central states from 1860 to the present time. The main topics discussed are curricula organization, changes in subject-matter for each high-school subject, and recent developments.

*Later numbers to be announced.*

